TENNESSEE AIR POLLUTION CONTROL BOARD DEPARTMENT OF ENVIRONMENT AND CONSERVATION NASHVILLE, TENNESSEE 37243-1531



ADMINISTRATIVE PERMIT AMENDMENT #1 OPERATING PERMIT (TITLE V) Issued Pursuant to Tennessee Air Quality Act

This permit fulfills the requirements of Title V of the Federal Clean Air Act (42 U.S.C. 7661a-7661e) and the federal regulations promulgated thereunder at 40 CFR Part 70 (FR Vol. 57, No. 140, Tuesday, July 21, 1992, pp. 32295-32312). This permit is issued in accordance with the provisions of paragraph 1200-03-09-.02(11) of the Tennessee Air Pollution Control Regulations. The permittee has been granted permission to operate an air contaminant source in accordance with emission limitations, monitoring requirements set forth herein.

Date Issued: March 5, 2013 **Permit Number:** 563336

Date of Administrative Permit Amendment #1: May 2, 2014

Date Expires: March 4, 2018

Issued To: Installation Address:

CalsonicKansei North America, Inc. 201 Garrett Parkway

Lewisburg

Primary SIC: 37

Installation Description: Plastic automotive components manufacturing.

01: Surface coating of plastic automotive components. (subject to MACT/NESHAP: Subpart PPPP)

03: Surface coating of plastic automotive instrument panels. Thermal oxidizer control.

23: Wave soldering operation.

Emission Source Reference No.: 59-0061

Renewal Application Due Date:

Between June 7, 2017 and September 5, 2017

Responsible Official: Facility Contact Person:

Name: Roger Murphree Name: Theresa Ervin Title: Director of Plastics Title: Environmental Engineer

Phone: (931) 684-4490

Information Relied Upon:

Title V Permit 555389 issued August 1, 2005 Minor Permit Modification dated January 3, 2006 Minor Permit Modification dated July 10, 2006 Minor Permit Modification dated July 31, 2007 Administrative Permit Amendment dated June 1, 2009 Title V application (short form) dated January 11, 2010 Title V application revision dated February 23, 2011 Title V application revision dated May 25, 2011 Administrative Amendment #1, application dated April 22, 2014, (notification of a change in Responsible Official)

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

POST AT INSTALLATION ADDRESS

CN-0827 (Rev. 2-13) RDA-1298

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SECTION A

GENERAL PERMIT CONDITIONS

A permit issued under the provisions of paragraph 1200-03-09-.02(11) is a permit issued pursuant to the requirements of Title V of the Federal Act and its implementing Federal regulations promulgated at 40 CFR, Part 70.

A1. <u>Definitions.</u> Terms not otherwise defined in the permit shall have the meaning assigned to such terms in the referenced regulation.

TAPCR 1200-03

A2. <u>Compliance requirement.</u> All terms and conditions in a permit issued pursuant to paragraph 1200-03-09-.02(11) including any provisions designed to limit a source's potential to emit, are enforceable by the Administrator and citizens under the Federal Act.

The permittee shall comply with all conditions of its permit. Except for requirements specifically designated herein as not being federally enforceable (State Only), non-compliance with the permit requirements is a violation of the Federal Act and the Tennessee Air Quality Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. Non-compliance with permit conditions specifically designated herein as not being federally enforceable (State Only) is a violation of the Tennessee Air Quality Act and may be grounds for these actions.

TAPCR 1200-03-09-.02(11)(e)2(i) and 1200-03-09-.02(11)(e)1(vi)(I)

A3. Need to halt or reduce activity. The need to halt or reduce activity is not a defense for noncompliance. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. However, nothing in this item shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in assessing penalties for noncompliance if the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continuing operations.

TAPCR 1200-03-09-.02(11)(e)1(vi)(II)

A4. The permit. The permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

TAPCR 1200-03-09-.02(11)(e)1(vi)(III)

A5. Property rights. The permit does not convey any property rights of any sort, or any exclusive privilege.

TAPCR 1200-03-09-.02(11)(e)1(vi)(IV)

A6. <u>Submittal of requested information.</u> The permittee shall furnish to the Technical Secretary, within a reasonable time, any information that the Technical Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or termination of the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Technical Secretary copies of records required to be kept by the permit. If the permittee claims that such information is confidential, the Technical Secretary may review that claim and hold the information in protected status until such time that the Board can hear any contested proceedings regarding confidentiality disputes. If the information is desired by EPA, the permittee may mail the information directly to EPA. Any claims of confidentiality for federal purposes will be determined by EPA.

TAPCR 1200-03-09-.02(11)(e)1(vi)(V)

A7. Severability clause. The requirements of this permit are severable. A dispute regarding one or more requirements of this permit does not invalidate or otherwise excuse the permittee from their duty to comply with the remaining portion of the permit.

TAPCR 1200-03-09.02(11)(e)1(v)

Expiration Date: March 4, 2018

A8. Fee payment.

Permit Number: 563336

(a) The permittee shall pay an annual major source emission fee based upon the responsible official's choice of actual emissions or allowable emissions. An emission cap of 4,000 tons per year per regulated pollutant per major source SIC Code shall apply to actual or allowable based emission fees. A major source annual emission fee will not be charged for emissions in excess of the cap (s) or for carbon monoxide.

- (b) Major sources who have filed a timely, complete operating permit application in accordance with 1200-03-09-.02(11), shall pay allowable emission based fees until the beginning of the next annual accounting period following receipt of their major source operating permit. At that time, the permittee shall begin paying their annual emission fee based upon their choice of actual or allowable based fees, or mixed actual and allowable based fees as stated under SECTION E of this permit. Once permitted, altering the existing choice shall be accomplished by a written request of the major source, filed in the office of the Technical Secretary at least one hundred eighty days prior to the expiration or reissuance of the major source operating permit.
- (c) Major sources must conform to the following requirements with respect to fee payments:
 - 1. If a major source choosing an allowable based annual emission fee wishes to restructure its allowable emissions for the purposes of lowering its annual emission fees, a mutually agreed upon, more restrictive regulatory requirement may be established to minimize the allowable emissions and thus the annual emission fee. The more restrictive requirement must be specified on the permit, and must include the method used to determine compliance with the limitation. The documentation procedure to be followed by the major source must also be included to insure that the limit is not exceeded. Restructuring the allowable emissions is permissible only in the annual accounting periods of eligibility and only, if the written request for restructuring is filed with the Technical Secretary at least 120 days prior to the beginning of the annual accounting period of eligibility. These periods of eligibility occur upon expiration of the initial major source operating permit, renewal of an expired major source operating permit or reissuance of a major source operating permit.
 - 2. Beginning with the annual accounting period beginning July 1, 2004 to June 30, 2005, major sources paying on allowable based emission fees will be billed by the Division no later than April 1 prior to the end of the accounting period. The major source annual emission fee is due July 1 following the end of the accounting period.
 - 3. Beginning with the annual accounting period beginning July 1, 2004 to June 30, 2005, major sources choosing an actual based annual emission fee shall file an actual emissions analysis with the Technical Secretary which summarizes the actual emissions of all regulated pollutants at the air contaminant sources of their facility. Based upon the actual emissions analysis, the source shall calculate the fee due and submit the payment and the analysis each July 1st following the end of the annual accounting period.
 - 4. Beginning with the annual accounting period beginning July 1, 2004 to June 30, 2005, major sources choosing a mixture of allowable and actual based emission fees shall file an actual emissions and allowable emissions analysis with the Technical Secretary which summarizes the actual and allowable emissions of all regulated pollutants at the air contaminant sources of their facility. Based upon the analysis, the source shall calculate the fee due and submit the payment and the analysis each July 1st following the end of the annual accounting period.

The mixed based fee shall be calculated utilizing the 4,000 ton cap specified in subparagraph 1200-03-26.02(2)(i). In determining the tonnages to be applied toward the regulated pollutant 4,000 ton cap in a mixed based fee, the source shall first calculate the actual emission based fees for a regulated pollutant and apply that tonnage toward the regulated pollutant's cap. The remaining tonnage available in the 4,000 ton category of a regulated pollutant shall be subject to allowable emission based fee calculations for the sources that were not included in the actual emission based fee calculations. Once the 4,000 ton cap has been reached for a regulated pollutant, no additional fee shall be required.

5. Major sources choosing to pay their major source annual emission fee based on actual based emissions or a mixture of allowable and actual based emissions may request an extension of time to file their emissions analysis with the Technical Secretary. The extension may be granted by the Technical Secretary up to ninety (90) days. The request for extension must be postmarked no later than July 1 or the request for extension shall be denied. The request for extension to file must state the reason and give an adequate explanation.

An estimated annual emission fee payment of no less than eighty percent (80%) of the fee due July 1 must accompany the request for extension to avoid penalties and interest on the underpayment of the annual emission fee. A remaining balance due must accompany the emission analysis. If there has been an overpayment, a refund may be requested in writing to the Division or be applied as a credit toward next year's major source annual emission fee. The request for extension of time is not available to major sources choosing to pay their major source annual emission fee based on allowable emissions.

6. Newly constructed major sources or minor existing sources modifying their operations such that they become a major source in the midst of the standard July 1st to June 30th annual accounting period, shall pay allowable based annual emission fees for the fractional remainder of the annual accounting period commencing upon their start-up. At the beginning of the next annual accounting period, the "responsible official" of the source may choose to pay annual emission fees based on actual or allowable emissions or a mixture of the two as provided for in this rule 1200-03-26-.02.

- (d) Where more than one (1) allowable emission limit is applicable to a regulated pollutant, the allowable emissions for the regulated pollutants shall not be double counted. Major sources subject to the provisions of paragraph 1200-03-26-.02(9) shall apportion their emissions as follows to ensure that their fees are not double counted.
 - 1. Sources that are subject to federally promulgated hazardous air pollutant standards that can be imposed under Chapter 1200-03-11 or Chapter 1200-03-31 will place such regulated emissions in the specific hazardous air pollutant under regulation. If the pollutant is also in the family of volatile organic compounds or the family of particulates, the pollutant shall not be placed in that respective family category.
 - 2. A miscellaneous category of hazardous air pollutants shall be used for hazardous air pollutants listed at part 1200-03-26-.02(2)(i)12 that do not have an allowable emission standard. A pollutant placed in this category shall not be subject to being placed in any other category such as volatile organic compounds or particulates.
 - **3.** Each individual hazardous air pollutant and the miscellaneous category of hazardous air pollutants is subject to the 4,000 ton cap provisions of subparagraph 1200-03-26-.02(2)(i).
 - Major sources that wish to pay annual emission fees for PM_{10} on an allowable emission basis may do so if they have a specific PM_{10} allowable emission standard. If a major source has a total particulate emission standard, but wishes to pay annual emission fees on an actual PM_{10} emission basis, it may do so if the PM_{10} actual emission levels are proven to the satisfaction of the Technical Secretary. The method to demonstrate the actual PM_{10} emission levels must be made as part of the source's major source operating permit in advance in order to exercise this option. The PM_{10} emissions reported under these options shall not be subject to fees under the family of particulate emissions. The 4,000 ton cap provisions of subparagraph 1200-03-26-.02(2)(i) shall also apply to PM_{10} emissions.

TAPCR 1200-03-26-.02 (3) and (9) and 1200-03-09-.02(11)(e)1(vii)

A9. Permit revision not required. A permit revision will not be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or process for changes that are provided for in the permit.

TAPCR 1200-03-09-.02(11)(e)1(viii)

- **A10.** <u>Inspection and entry.</u> Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Technical Secretary or his authorized representative to perform the following for the purposes of determining compliance with the permit applicable requirements:
 - (a) Enter upon, at reasonable times, the permittee's premises where a source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
 - (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
 - (c) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - (d) As authorized by the Clean Air Act and Chapter 1200-03-10 of TAPCR, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
 - (e) "Reasonable times" shall be considered to be customary business hours unless reasonable cause exists to suspect noncompliance with the Act, Division 1200-03 or any permit issued pursuant thereto and the Technical Secretary specifically authorizes an inspector to inspect a facility at any other time.

TAPCR 1200-03-09-.02(11)(e)3.(ii)

A11. Permit shield.

- (a) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date of permit issuance, provided that:
 - 1. Such applicable requirements are included and are specifically identified in the permit; or

2. The Technical Secretary, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.

- **(b)** Nothing in this permit shall alter or affect the following:
 - 1. The provisions of section 303 of the Federal Act (emergency orders), including the authority of the Administrator under that section. Similarly, the provisions of T.C.A. §68-201-109 (emergency orders) including the authority of the Governor under the section;
 - 2. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - 3. The applicable requirements of the acid rain program, consistent with section 408(a) of the Federal Act; or
 - 4. The ability of EPA to obtain information from a source pursuant to section 114 of the Federal Act.
- **(c)** Permit shield is granted to the permittee.

A12. Permit renewal and expiration.

- (a) Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted at least 180 days, but no more than 270 days prior to the expiration of this permit.
- (b) Provided that the permittee submits a timely and complete application for permit renewal the source will not be considered in violation of paragraph 1200-03-09-.02(11) until the Technical Secretary takes final action on the permit application, except as otherwise noted in paragraph 1200-03-09-.02(11).
- (c) This permit, its shield provided in Condition A11, and its conditions will be extended and effective after its expiration date provided that the source has submitted a timely, complete renewal application to the Technical Secretary.

TAPCR 1200-03-09-.02(11)(f)3 and 2, 1200-03-09-.02(11)(d)1(i)(III), and 1200-03-09-.02(11)(a)2

A13. Reopening for cause.

- (a) A permit shall be reopened and revised prior to the expiration of the permit under any of the circumstances listed below:
 - 1. Additional applicable requirements under the Federal Act become applicable to the sources contained in this permit provided the permit has a remaining term of 3 or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the permit expiration date of this permit, unless the original has been extended pursuant to 1200-03-09-.02(11)(a)2.
 - **2.** Additional requirements become applicable to an affected source under the acid rain program.
 - **3.** The Technical Secretary or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - **4.** The Technical Secretary or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- (b) Proceedings to reopen and issue a permit shall follow the same proceedings as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists, and not the entire permit. Such reopening shall be made as expeditiously as practicable.
- (c) Reopenings for cause shall not be initiated before a notice of such intent is provided to the permittee by the Technical Secretary at least 30 days in advance of the date that the permit is to be reopened except that the Technical Secretary may provide a shorter time period in the case of an emergency. An emergency shall be established by the criteria of T.C.A. 68-201-109 or other compelling reasons that public welfare is being adversely affected by the operation of a source that is in compliance with its permit requirements.
- (d) If the Administrator finds that cause exists to terminate, modify, or revoke and reissue a permit as identified in A13, he is required under federal rules to notify the Technical Secretary and the permittee of such findings in writing. Upon receipt of such notification, the Technical Secretary shall investigate the matter in order to determine if he agrees or disagrees with the Administrator's findings. If he agrees with the Administrator's findings, the Technical Secretary shall conduct the reopening in the following manner:

1. The Technical Secretary shall, within 90 days after receipt of such notification, forward to EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate. If the Administrator grants additional time to secure permit applications or additional information from the permittee, the Technical Secretary shall have the additional time period added to the standard 90 day time period.

- **2.** EPA will evaluate the Technical Secretary's proposed revisions and respond as to their evaluation.
- **3.** If EPA agrees with the proposed revisions, the Technical Secretary shall proceed with the reopening in the same manner prescribed under Condition A13 (b) and Condition A13 (c).
- 4. If the Technical Secretary disagrees with either the findings or the Administrator that a permit should be reopened or an objection of the Administrator to a proposed revision to a permit submitted pursuant to Condition A13(d), he shall bring the matter to the Board at its next regularly scheduled meeting for instructions as to how he should proceed. The permittee shall be required to file a written brief expressing their position relative to the Administrator's objection and have a responsible official present at the meeting to answer questions for the Board. If the Board agrees that EPA is wrong in their demand for a permit revision, they shall instruct the Technical Secretary to conform to EPA's demand, but to issue the permit under protest preserving all rights available for litigation against EPA.

TAPCR 1200-03-09-.02(11)(f)6 and 7.

- **A14. Permit transference.** An administrative permit amendment allows for a change of ownership or operational control of a source where the Technical Secretary determines that no other change in the permit is necessary, provided that the following requirements are met:
 - (a) Transfer of ownership permit application is filed consistent with the provisions of 1200-03-09-.03(6), and
 - (b) Written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Technical Secretary.

TAPCR 1200-03-09-.02(11)(f)4(i)(IV) and 1200-03-09-.03(6)

- A15. <u>Air pollution alert.</u> When the Technical Secretary has declared that an air pollution alert, an air pollution warning, or an air pollution emergency exists, the permittee must follow the requirements for that episode level as outlined in TAPCR 1200-03-09-.03(1) and TAPCR 1200-03-15-.03.
- A16. Construction permit required. Except as exempted in TAPCR 1200-03-09-.04, or excluded in subparagraph TAPCR 1200-03-02-.01(1)(aa) or subparagraph TAPCR 1200-03-02-.01(1)(cc), this facility shall not begin the construction of a new air contaminant source or the modification of an air contaminant source which may result in the discharge of air contaminants without first having applied for and received from the Technical Secretary a construction permit for the construction or modification of such air contaminant source.

TAPCR 1200-03-09-.01(1)(a)

- **A17.** Notification of changes. The permittee shall notify the Technical Secretary 30 days prior to commencement of any of the following changes to an air contaminant source which would not be a modification requiring a construction permit.
 - (a) change in air pollution control equipment
 - (b) change in stack height or diameter
 - (c) change in exit velocity of more than 25 percent or exit temperature of more than 15 percent based on absolute temperature.

TAPCR 1200-03-09-.02(7)

A18. Schedule of compliance. The permittee will comply with any applicable requirement that becomes effective during the permit term on a timely basis. If the permittee is not in compliance, the permittee must submit a schedule for coming into compliance, which must include a schedule of remedial measure(s), including an enforceable set of deadlines for specific actions.

TAPCR 1200-03-09-.02(11)(d)3 and 40 CFR Part 70.5(c)

A19. <u>Title VI.</u>

(a) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR, Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:

1. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to Section 82.156.

- **2.** Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to Section 82.158.
- **3.** Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to Section 82.161.
- (b) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone depleting substance refrigerant in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR, Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.
- (c) The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR, Part 82, Subpart G, Significant New Alternatives Policy Program.
- **A20.** <u>112 (r).</u> The permittee shall comply with the requirement to submit to the Administrator or designated State Agency a risk management plan, including a registration that reflects all covered processes, by June 21, 1999, if the permittee's facility is required pursuant to 40 CFR 68 to submit such a plan.

TAPCR 1200-03-32-.03(3)

SECTION B

GENERAL CONDITIONS for MONITORING, REPORTING, and ENFORCEMENT

- **B1.** Recordkeeping. Monitoring and related record keeping shall be performed in accordance with the requirements specified in the permit conditions for each individual permit unit. In no case shall reports of any required monitoring and record keeping be submitted less frequently than every six months.
 - (a) Where applicable, records of required monitoring information include the following:
 - 1. The date, place as defined in the permit, and time of sampling or measurements;
 - **2.** The date(s) analyses were performed;
 - **3.** The company or entity that performed the analysis;
 - **4.** The analytical techniques or methods used;
 - 5. The results of such analyses; and
 - **6.** The operating conditions as existing at the time of sampling or measurement.
 - (b) Digital data accumulation which utilizes valid data compression techniques shall be acceptable for compliance determination as long as such compression does not violate an applicable requirement and its use has been approved in advance by the Technical Secretary.

TAPCR 1200-03-09-.02(11)(e)1(iii)

B2. Retention of monitoring data. The permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

TAPCR 1200-03-09-.02(11)(e)1(iii)(II)II

Reporting. Reports of any required monitoring and record keeping shall be submitted to the Technical Secretary in accordance with the frequencies specified in the permit conditions for each individual permit unit. Reporting periods will be dated from the end of the first complete calendar quarter following issuance of this permit unless otherwise noted. Reports shall be submitted within 60 days of the close of the reporting period unless otherwise noted. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official. Reports required under "State only requirements" are not required to be certified by a responsible official.

TAPCR 1200-03-09-.02(11)(e)1(iii)

B4. <u>Certification.</u> Except for reports required under "State Only" requirements, any application form, report or compliance certification submitted pursuant to the requirements of this permit shall contain certification by a responsible official of truth, accuracy and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

TAPCR 1200-03-09-.02(11)(d)4

- **B5.** Annual compliance certification. The permittee shall submit annually compliance certifications with terms and conditions contained in Sections A, B, D and E of this permit, including emission limitations, standards, or work practices. This compliance certification shall include all of the following (provided that the identification of applicable information may cross-reference the permit or previous reports, as applicable):
 - (a) The identification of each term or condition of the permit that is the basis of the certification;
 - (b) The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period;
 - (c) Whether such method(s) or other means provide continuous or intermittent data. Such methods and other means shall include, at a minimum, the methods and means required by this permit. If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Federal Act, which prohibits knowingly making a false certification or omitting material information;
 - (d) The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance was continuous or intermittent. The certification shall be based on the method or means designated in B5(b) above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion* or exceedance** as defined below occurred; and
 - (e) Such other facts as the Technical Secretary may require to determine the compliance status of the source.
 - * "Excursion" shall mean a departure from an indicator range established for monitoring under this paragraph, consistent with any averaging period specified for averaging the results of the monitoring.
 - ** "Exceedance" shall mean a condition that is detected by monitoring that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) are greater than the applicable emission limitation or standard (or less than the applicable standard in the case of a percent reduction requirement) consistent with any averaging period specified for averaging the results of the monitoring.

40 CFR Part 70.6(c)(5)(iii) as amended in the Federal Register Vol.62, No.204, October 22, 1997, pages 54946 and 54947

B6. Submission of compliance certification.

Technical Secretary Columbia Environmental Field Office Division of Air Pollution Control 1421 Hampshire Pike Columbia, TN 38401 The compliance certification shall be submitted to:

and Air and EPCRA Enforcement Branch
US EPA Region IV
61 Forsyth Street, SW
Atlanta, Georgia 30303

TAPCR 1200-03-09-.02(11)(e)3(v)(IV)

- **B7.** Emergency provisions. An emergency constitutes an affirmative defense to an enforcement action brought against this source for noncompliance with a technology based emission limitation due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
 - (a) The affirmative defense of the emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - 1. An emergency occurred and that the permittee can identify the probable cause(s) of the emergency. "Probable" must be supported by a credible investigation into the incident that seeks to identify the causes and results in an explanation supported by generally accepted engineering or scientific principles.
 - 2. The permitted source was at the time being properly operated. In determining whether or not a source was being properly operated, the Technical Secretary shall examine the source's written standard operating procedures

which were in effect at the time of the noncompliance and any other code as detailed below that would be relevant to preventing the noncompliance. Adherence to the source's standard operating procedures will be the test of adequate preventative maintenance, careless operation, improper operation or operator error to the extent that such adherence would prevent noncompliance. The source's failure to follow recognized standards of practice to the extent that adherence to such a standard would have prevented noncompliance will disqualify the source from any claim of an emergency and an affirmative defense.

- **3.** During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
- 4. The permittee submitted notice of the emergency to the Technical Secretary according to the notification criteria for malfunctions in rule 1200-03-20-.03. For the purposes of this condition, "emergency" shall be substituted for "malfunction(s)" in rule 1200-03-20-.03 to determine the relevant notification threshold. The notice shall include a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- **(b)** In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (c) The provisions of this condition are in addition to any emergency, malfunction or upset requirement contained in Division 1200-03 or other applicable requirement.

TAPCR 1200-03-09-.02(11)(e)7

B8. <u>Excess emissions reporting.</u>

- (a) The permittee shall promptly notify the Technical Secretary when any emission source, air pollution control equipment, or related facility breaks down in such a manner to cause the emission of air contaminants in excess of the applicable emission standards contained in Division 1200-03 or any permit issued thereto, or of sufficient duration to cause damage to property or public health. The permittee must provide the Technical Secretary with a statement giving all pertinent facts, including the estimated duration of the breakdown. Violations of the visible emission standard which occur for less than 20 minutes in one day (midnight to midnight) need not be reported. Prompt notification will be within 24 hours of the malfunction and shall be provided by telephone to the Division's Nashville office. The Technical Secretary shall be notified when the condition causing the failure or breakdown has been corrected. In attainment and unclassified areas if emissions other than from sources designated as significantly impacting on a nonattainment area in excess of the standards will not and do not occur over more than a 24-hour period (or will not recur over more than a 24-hour period) and no damage to property and or public health is anticipated, notification is not required.
- (b) Any malfunction that creates an imminent hazard to health must be reported by telephone immediately to the Division's Nashville office and to the State Civil Defense.
- (c) A log of all malfunctions, startups, and shutdowns resulting in emissions in excess of the standards in Division 1200-03 or any permit issued thereto must be kept at the plant. All information shall be entered in the log no later than twenty-four (24) hours after the startup or shutdown is complete, or the malfunction has ceased or has been corrected. Any later discovered corrections can be added in the log as footnotes with the reason given for the change. This log must record at least the following:
 - 1. Stack or emission point involved
 - 2. Time malfunction, startup, or shutdown began and/or when first noticed
 - **3.** Type of malfunction and/or reason for shutdown
 - **4.** Time startup or shutdown was complete or time the air contaminant source returned to normal operation.
 - 5. The company employee making entry on the log must sign, date, and indicate the time of each log the information under items 1. and 2. must be entered into the log by the end of the shift during which the malfunction or startup began. For any source utilizing continuous emission(s) monitoring, continuous emission(s) monitoring collection satisfies the above log keeping requirement.

TAPCR 1200-03-20-.03 and .04

Malfunctions, startups and shutdowns - reasonable measures required. The permittee must take all reasonable measures to keep emissions to a minimum during startups, shutdowns, and malfunctions. These measures may include installation and use of alternate control systems, changes in operating methods or procedures, cessation of operation until the process equipment and/or air pollution control equipment is repaired, maintaining sufficient spare parts, use of overtime labor, use of outside consultants and contractors, and other appropriate means. Failures that are caused by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions. This provision does not apply to standards found in 40 CFR, Parts 60 (Standards of performance for new stationary sources), 61 (National emission standards for hazardous air pollutants) and 63 (National emission standards for hazardous air pollutants for source categories).

TAPCR 1200-03-20-.02

B10. Sources located in non-attainment areas or having significant impact on air quality in a non-attainment area. The owner or operator of all sources located in non-attainment areas or having a significant impact on air quality in a non-attainment area (for the pollutant designated) must submit a report to the Technical Secretary within thirty (30) days after the end of each calendar quarter listing the times at which malfunctions, startups and/or shutdowns, which resulted in emissions greater than any applicable emission limits, occurred, and the estimated amount of emissions discharged during such times. This report shall also include total emissions during the quarter and be reported in a format specified by the Technical Secretary.

TAPCR 1200-03-20-.04(2)

- **Report required upon the issuance of a notice of violation for excess emissions.** The permittee must submit within twenty (20) days after receipt of the notice of violation, the data shown below to assist the Technical Secretary in deciding whether to excuse or validate the violation. If this data has previously been available to the Technical Secretary prior to the issuance of the notice of violation no further action is required of the violating source. However, if the source desires to submit additional information, then this must be submitted within the same twenty (20) day time period. The minimum data requirements are:
 - (a) The identity of the stack and/or other emission point where the excess emission(s) occurred;
 - (b) The magnitude of the excess emissions expressed in pounds per hour and the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;
 - (c) The time and duration of the emissions;
 - (d) The nature and cause of such emissions:
 - (e) For malfunctions, the steps taken to correct the situation and the action taken or planned to prevent the recurrence of such malfunctions;
 - (f) The steps taken to limit the excess emissions during the occurrence reported, and
 - (g) If applicable, documentation that the air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good operating practices for minimizing emissions.

Failure to submit the required report within the twenty (20) day period specified shall preclude the admissibility of the data for consideration of excusal for malfunctions.

TAPCR 1200-03-20-.06(2), (3) and (4)

SECTION C

PERMIT CHANGES

- **C1.** Operational flexibility changes. The source may make operational flexibility changes that are not addressed or prohibited by the permit without a permit revision subject to the following requirements:
 - (a) The change cannot be subject to a requirement of Title IV of the Federal Act or Chapter 1200-03-30.
 - **(b)** The change cannot be a modification under any provision of Title I of the federal Act or Division 1200-03.
 - (c) Each change shall meet all applicable requirements and shall not violate any existing permit term or condition.
 - (d) The source must provide contemporaneous written notice to the Technical Secretary and EPA of each such change, except for changes that are below the threshold of levels that are specified in Rule 1200-03-09-.04.

(e) Each change shall be described in the notice including the date, any change in emissions, pollutants emitted, and any applicable requirements that would apply as a result of the change.

- (f) The change shall not qualify for a permit shield under the provisions of part 1200-03-09-.02(11)(e)6.
- (g) The permittee shall keep a record describing the changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes. The records shall be retained until the changes are incorporated into subsequently issued permits.

TAPCR 1200-03-09-.02(11)(a)4 (ii)

C2. Section 502(b)(10) changes.

- (a) The permittee can make certain changes without requiring a permit revision, if the changes are not modifications under Title I of the Federal Act or Division 1200-03 and the changes do not exceed the emissions allowable under the permit. The permittee must, however, provide the Administrator and Technical Secretary with written notification within a minimum of 7 days in advance of the proposed changes. The Technical Secretary may waive the 7 day advance notice in instances where the source demonstrates in writing that an emergency necessitates the change. Emergency shall be demonstrated by the criteria of TAPCR 1200-03-09-.02(11)(e)7 and in no way shall it include changes solely to take advantages of an unforeseen business opportunity. The Technical Secretary and EPA shall attach each such notice to their copy of the relevant permit.
- (b) The written notification must be signed by the facility Title V Responsible Official and include the following:
 - 1. a brief description of the change within the permitted facility;
 - 2. specifies the date on which the change will occur;
 - **3.** declares and quantifies where possible any change in emissions;
 - 4. declares any permit term or condition that is no longer applicable as a result of the change; and
 - 5. declares the requested change is not a Title I modification and will not exceed allowable emissions under the permit.
- (c) The permit shield provisions of TAPCR 1200-03-09-.02(11)(e)6 shall not apply to Section 502(b)(10) changes.

TAPCR 1200-03-09-.02(11)(a)4 (i)

C3. <u>Administrative amendment.</u>

- (a) Administrative permit amendments to this permit shall be in accordance with 1200-03-09-.02(11)(f)4. The source may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request.
- (b) The permit shield shall be extended as part of an administrative permit amendment revision consistent with the provisions of TAPCR 1200-03-09-.02(11)(e)6 for such revisions made pursuant to item (c) of this condition which meet the relevant requirements of TAPCR 1200-03-09-.02(11)(e), TAPCR 1200-03-09-.02(11)(f) and TAPCR 1200-03-09-.02(11)(g) for significant permit modifications.
- (c) Proceedings to review and grant administrative permit amendments shall be limited to only those parts of the permit for which cause to amend exists, and not the entire permit.

TAPCR 1200-03-09-.02(11)(f)4

C4. <u>Minor permit modifications.</u>

- (a) The permittee may submit an application for a minor permit modification in accordance with TAPCR 1200-03-09-.02(11)(f)5(ii).
- **(b)** The permittee may make the change proposed in its minor permit modification immediately after an application is filed with the Technical Secretary.
- (c) Proceedings to review and modify permits shall be limited to only those parts of the permit for which cause to modify exists, and not the entire permit.
- (d) Minor permit modifications do not qualify for a permit shield.

TAPCR 1200-03-09-.02(11)(f)5(ii)

C5. Significant permit modifications.

(a) The permittee may submit an application for a significant modification in accordance with TAPCR 1200-03-09-.02(11)(f)5(iv).

(b) Proceedings to review and modify permits shall be limited to only those parts of the permit for which cause to modify exists, and not the entire permit.

TAPCR 1200-03-09-.02(11)(f)5(iv)

C6. New construction or modifications.

Future construction at this source that is subject to the provisions of TAPCR 1200-03-09-.01 shall be governed by the following:

- (a) The permittee shall designate in their construction permit application the route that they desire to follow for the purposes of incorporating the newly constructed or modified sources into their existing operating permit. The Technical Secretary shall use that information to prepare the operating permit application submittal deadlines in their construction permit.
- (b) Sources desiring the permit shield shall choose the administrative amendment route of TAPCR 1200-03-09-.02(11)(f)4 or the significant modification route of TAPCR 1200-03-09-.02(11)(f)5(iv).
- (c) Sources desiring expediency instead of the permit shield shall choose the minor permit modification procedure route of TAPCR 1200-03-09-.02(11)(f)5(ii) or group processing of minor modifications under the provisions of TAPCR 1200-03-09-.02(11)(f)5(iii) as applicable to the magnitude of their construction.

TAPCR 1200-03-09-.02(11)(d) 1(i)(V)

SECTION D

GENERAL APPLICABLE REQUIREMENTS

Visible emissions. With the exception of air emission sources exempt from the requirements of TAPCR Chapter 1200-03-05 and air emission sources for which a different opacity standard is specifically provided elsewhere in this permit, the permittee shall not cause, suffer, allow or permit discharge of a visible emission from any air contaminant source with an opacity in excess of twenty (20) percent for an aggregate of more than five (5) minutes in any one (1) hour or more than twenty (20) minutes in any twenty-four (24) hour period; provided, however, that for fuel burning installations with fuel burning equipment of input capacity greater than 600 million btu per hour, the permittee shall not cause, suffer, allow, or permit discharge of a visible emission from any fuel burning installation with an opacity in excess of twenty (20) percent (6-minute average) except for one six minute period per one (1) hour of not more than forty (40) percent opacity. Sources constructed or modified after July 7, 1992 shall utilize 6-minute averaging.

Consistent with the requirements of TAPCR Chapter 1200-03-20, due allowance may be made for visible emissions in excess of that permitted under TAPCR 1200-03-05 which are necessary or unavoidable due to routine startup and shutdown conditions. The facility shall maintain a continuous, current log of all excess visible emissions showing the time at which such conditions began and ended and that such record shall be available to the Technical Secretary or his representative upon his request.

TAPCR 1200-03-05-.01(1), TAPCR 1200-03-05-.03(6) and TAPCR 1200-03-05-.02(1)

D2. General provisions and applicability for non-process gaseous emissions. Any person constructing or otherwise establishing a non-portable air contaminant source emitting gaseous air contaminants after April 3, 1972, or relocating an air contaminant source more than 1.0 km from the previous position after November 6, 1988, shall install and utilize the best equipment and technology currently available for controlling such gaseous emissions.

TAPCR 1200-03-06-.03(2)

- **D3.** <u>Non-process emission standards.</u> The permittee shall not cause, suffer, allow, or permit particulate emissions from non-process sources in excess of the standards in TAPCR 1200-03-06.
- **D4.** General provisions and applicability for process gaseous emissions. Any person constructing or otherwise establishing an air contaminant source emitting gaseous air contaminants after April 3, 1972, or relocating an air contaminant source more than 1.0 km from the previous position after November 6, 1988, shall install and utilize equipment and technology which is deemed reasonable and proper by the Technical Secretary.

TAPCR 1200-03-07-.07(2)

Particulate emissions from process emission sources. The permittee shall not cause, suffer, allow, or permit particulate emissions from process sources in excess of the standards in TAPCR 1200-03-07.

D6. Sulfur dioxide emission standards. The permittee shall not cause, suffer, allow, or permit Sulfur dioxide emissions from process and non-process sources in excess of the standards in TAPCR 1200-03-14. Regardless of the specific emission standard, new process sources shall utilize the best available control technology as deemed appropriate by the Technical Secretary of the Tennessee Air Pollution Control Board.

D7. Fugitive Dust.

- (a) The permittee shall not cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, but not be limited to, the following:
 - 1. Use, where possible, of water or chemicals for control of dust in demolition of existing buildings or structures, construction operations, grading of roads, or the clearing of land;
 - 2. Application of asphalt, oil, water, or suitable chemicals on dirt roads, material stock piles, and other surfaces which can create airborne dusts;
 - **3.** Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations.
- (b) The permittee shall not cause, suffer, allow, or permit fugitive dust to be emitted in such manner to exceed five (5) minutes per hour or twenty (20) minutes per day as to produce a visible emission beyond the property line of the property on which the emission originates, excluding malfunction of equipment as provided in Chapter 1200-03-20.

TAPCR 1200-03-08

- **D8.** Open burning. The permittee shall comply with the TAPCR 1200-03-04-.04 for all open burning activities at the facility. TAPCR 1200-03-04
- **D9.** Asbestos. Where applicable, the permittee shall comply with the requirements of 1200-03-11-.02(d) when conducting any renovation or demolition activities at the facility.

TAPCR 1200-03-11-.02(d) and 40 CFR, Part 61

D10. Annual certification of compliance. The generally applicable requirements set forth in Section D of this permit are intended to apply to activities and sources that are not subject to source-specific applicable requirements contained in State of Tennessee and U.S. EPA regulations. By annual certification of compliance, the permittee shall be considered to meet the monitoring and related record keeping and reporting requirements of TAPCR 1200-03-09-.02(11)(e)1.(iii) and 1200-03-10-.04(2)(b)1 and compliance requirements of TAPCR 1200-03-09-.02(11)(e)3.(i). The permittee shall submit compliance certification for these conditions annually.

SECTION E

SOURCE SPECIFIC EMISSION STANDARDS, OPERATING LIMITATIONS, and MONITORING, RECORDKEEPING and REPORTING REQUIREMENTS

59-0061 Source Description: Manufacturing of plastic automotive components	for the automotive industry.
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Conditions E1 through E3-11 apply to all sources in Section E of this permit unless otherwise noted.

E1. Fee payment: actual emissions basis.

Permit Number: 563336

FEE EMISSIONS SUMMARY TABLE FOR MAJOR SOURCE 59-0061

	ALLOWABLE EMISSIONS	ACTUAL EMISSIONS	
REGULATED POLLUTANTS	(tons per AAP)	(tons per AAP)	COMMENTS
PARTICULATE MATTER (PM)	N/A	AEAR	Includes all fee emissions.
PM_{10}	N/A	N/A	
SO_2	N/A	N/A	
VOC	N/A	AEAR	Includes all fee emissions.
NO _x	N/A	N/A	
CATEGORY OF MISCELLANI	EOUS HAZARDO	US AIR POLLUTA	NTS (HAP WITHOUT A STANDARD)*
VOC FAMILY GROUP	N/A	N/A	
NON-VOC GASEOUS GROUP	N/A	N/A	
PM FAMILY GROUP	N/A	AEAR	Lead emissions included in PM above.
CATEGORY OF SPECIF	TIC HAZARDOUS	AIR POLLUTANT	TS (HAP WITH A STANDARD)**
VOC FAMILY GROUP	N/A	AEAR	Included in VOCs above.
NON-VOC GASEOUS GROUP	N/A	AEAR	
PM FAMILY GROUP	N/A	N/A	
CATEGO	RY OF NSPS POL	LUTANTS NOT LI	ISTED ABOVE***
EACH NSPS POLLUTANT	N/A	N/A	
NOT LISTED ABOVE			

NOTES

- AAP The Annual Accounting Period (AAP) is a twelve (12) consecutive month period that begins each July 1st and ends June 30th of the following year. The present Annual Accounting Period began July 1, 2012 and ends June 30, 2013. The next Annual Accounting Period begins July 1, 2013 and ends June 30, 2014.
- N/A N/A indicates that no emissions are specified for fee computation.
- **AEAR AEAR** indicates that an **Actual Emissions Analysis** is **Required** to determine the actual emissions of:
 - (1) each regulated pollutant (Particulate matter, SO_2 , VOC, NO_X and so forth. See TAPCR 1200-03-26-.02(2)(i) for the definition of a regulated pollutant.),
 - (2) each pollutant group (VOC Family, Non-VOC Gaseous, and Particulate Family), and
 - (3) the Miscellaneous HAP Category

under consideration during the Annual Accounting Period.

* <u>Category Of Miscellaneous HAP</u> (HAP Without A Standard): This category is made-up of hazardous air pollutants that do not have a federal or state standard. Each HAP is classified into one of three groups, the VOC Family group, the Non-VOC Gaseous group, or the Particulate (PM) Family group. <u>For fee computation</u>, the Miscellaneous HAP Category is subject to the 4,000 ton cap provisions of subparagraph 1200-03-26-.02(2)(i).

** Category Of Specific HAP (HAP With A Standard): This category is made-up of hazardous air pollutants (HAP) that are subject to Federally promulgated Hazardous Air Pollutant Standards that can be imposed under Chapter 1200-03-11 or Chapter 1200-03-31. Each individual hazardous air pollutant is classified into one of three groups, the VOC Family group, the Non-VOC Gaseous group, or the Particulate (PM) Family group. For fee computation, each individual hazardous air pollutant of the Specific HAP Category is subject to the 4,000 ton cap provisions of subparagraph 1200-03-26-.02(2)(I).

*** Category Of NSPS Pollutants Not Listed Above: This category is made-up of each New Source Performance Standard (NSPS) pollutant whose emissions are not included in the PM, SO₂, VOC or NO_X emissions from each source in this permit. For fee computation, each NSPS pollutant not listed above is subject to the 4,000 ton cap provisions of subparagraph 1200-03-26-.02(2)(i).

END NOTES

The permittee shall:

- (1) Pay major source annual **actual based emission fees**, as requested by the responsible official, for each annual accounting period (AAP) by July 1 of each year.
- Prepare an **actual emissions analysis** in accordance with the above **Fee Emissions Summary Table** for each AAP (July 1 of each year through June 30 of the following year). The **actual emissions analysis** shall include:
 - (a) the completed Fee Emissions Summary Table,
 - (b) each AEAR required by the above Fee Emissions Summary Table, and
 - (c) the records, or a summary of the records, required by Conditions E3-3 (logs 1 & 3 for each emission source, & log4), E5-1 (logs 5 & 6b), E6-1 (logs 7a & 7c), and E7-3 (log 8) of this permit. These records shall be used to complete the AEARs required by the above Fee Emissions Summary Table.
- (3) Submit the **actual emissions analysis** at the time the fees are paid in full.
- Calculate the fee due based upon the **actual emissions analysis**, and submit the payment on July 1st following the end of the **Annual Accounting Period**. If any part of any fee imposed under TAPCR 1200-03-26-.02 is not paid within fifteen (15) days of the due date, penalties shall at once accrue as specified in TAPCR 1200-03-26-.02(8). Major sources may request an extension of time to file their emissions analysis with the Technical Secretary as specified in Condition **A8(c)5** of this permit. Emissions for regulated pollutants shall not be double counted as specified in Condition **A8(d)** of this permit.

Payment of the fee due shall be submitted to The Technical Secretary at the following address:

TN Department of Environment & Conservation Division of Fiscal Services Consolidated Fee Section-APC 14th Floor L & C Tower 401 Church Street Nashville, Tennessee 37243-1531

TAPCR 1200-03-26-.02(3) and (9), and 1200-03-09-.02(11)(e)1(vii)

E2. Reporting requirements.

(a) <u>Semiannual reports.</u> In order to maintain the same reporting schedule established in the original Title V permit, the first report for this 2^{nd} renewal shall cover the following permits and time periods:

Permit	Report period begins	Report period ends
555389 (1 st renewal)	October 1, 2012	March 31, 2013
563336 (2 nd renewal)	April 1, 2013	September 30, 2013

The report covering the full 6 month period shall be submitted within 60 days after March 31, 2013. Subsequent reports revert fully to permit #563336 and shall be submitted within 60 days after the end of each 6-month period following the first report. Semiannual periods continue to cover the periods April through September and October through March. All instances of deviations from permit requirements must be clearly identified in these reports and the reports must be certified by a responsible official.

These semiannual reports shall include:

- (1) Any monitoring and recordkeeping required by Conditions E3-2, E3-3, E5-1, E5-2, E6-1, E6-2, E7-1, E7-2, and E7-3 of this permit. However, a summary report of this data is acceptable provided there is sufficient information to enable the Technical Secretary to evaluate compliance.
- (2) The visible emission evaluation readings from conditions **E5-3**, **E6-3** and **E7-4** of this permit if required. However, a summary report of this data is acceptable provided there is sufficient information to enable the Technical Secretary to evaluate compliance.
- (3) Identification of all instances of deviations* from <u>ALL PERMIT REQUIREMENTS</u>.
 - *Deviation shall mean any departure or any situation in which an emission source fails to comply with a permit term or condition. A deviation does not always constitute a Notice of Violation being issued by the Division. A deviation can be determined by observation or through review of data obtained from any testing, monitoring, or recordkeeping established in the Title V Major Source Operating Permit in accordance with TAPCR 1200-03-09-.02(11)(e). For a situation lasting more than 24 hours that constitutes a deviation, each 24 hour period is considered a separate deviation.
- (4) The MACT semiannual compliance reporting periods detailed in Condition **E4-1** shall be synchronized with the semiannual reporting periods for this Title V permit. The semiannual reporting periods of October 1st through March 30th and April 1st through September 30th have been established and are stipulated in Condition **E2(a)**. The MACT reports shall be submitted as a separate report to the Division within 60 days after each 6-month period ends and shall be titled, "MACT report requirements of 40 CFR 63 Subpart PPPP".

These reports must be certified by a responsible official consistent with Condition B4 of this permit and shall be submitted to The Technical Secretary at the address in Condition E2(b) of this permit except for the MACT semiannual compliance reports. The MACT semiannual compliance reports shall be submitted to the West Tennessee Permitting Program at the following address:

Technical Secretary
Division of Air Pollution Control
9th Floor L & C Annex
401 Church Street
Nashville, TN 37243-1531

TAPCR 1200-03-09-.02(11)(e)1.(iii)

- (b) Annual compliance certification. The permittee shall submit annually compliance certifications with <u>ALL</u> terms and conditions contained in Sections A, B, D, & E of this permit, including emission limitations, standards, or work practices. This compliance certification shall include all of the following (provided that the identification of applicable information may cross-reference the permit or previous reports, as applicable):
 - (1) The identification of each term or condition of the permit that is the basis of the certification;
 - The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period;
 - (3) Whether such method(s) or other means provide continuous or intermittent data. Such methods and other means shall include, at a minimum, the methods and means required by this permit. If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Federal Act, which prohibits knowingly making a false certification or omitting material information;
 - (4) The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the method or means designated in **E2(b)2** above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion* or exceedance** as defined below occurred; and

(5) Such other facts as the Technical Secretary may require to determine the compliance status of the source.

* Excursion shall mean a departure from an indicator range established for monitoring under this paragraph, consistent with any averaging period specified for averaging the results of the monitoring.

** Exceedance shall mean a condition that is detected by monitoring that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) are greater than the applicable emission limitation or standard (or less than the applicable standard in the case of a percent reduction requirement) consistent with any averaging period specified for averaging the results of the monitoring.

In order to maintain the same reporting schedule established in the original Title V permit, the first certification for this 2nd renewal shall cover the following permits and time periods:

Permit Certification period begins		Certification period ends
555389 (1 st renewal)	October 1, 2012	March 31, 2013
563336 (2 nd renewal)	April 1, 2013	September 30, 2013

The certification covering the full 12 month period shall be submitted within 60 days after **September 30, 2013**. Subsequent certifications revert fully to permit #563336 and shall be submitted within 60 days after the end of each 12-month period following the first certification.

These certifications shall be submitted to: TN APCD and EPA

Technical Secretary and Air and EPCRA Enforcement Branch

Columbia Environmental Field Office

Division of Air Pollution Control

1421 Hampshire Pike

Columbia, TN 38401

US EPA Region IV
61 Forsyth Street, SW
Atlanta, Georgia 30303

(c) <u>Retention of Records</u> All records required by any condition in Section E of this permit must be retained for a period of not less than 5 years. Additionally, these records shall be kept available for inspection by the Technical Secretary or his representative.

40 CFR Part 70.6(c)(5)(iii) as amended in the Federal Register Vol.62, No.204, October 22, 1997, pages 54946 and 54947

E3. General Permit Requirements

E3-1. The Permittee's purchase orders, and/or invoices, electronic records of the same, or actual usage records for all VOC-containing and HAP-containing materials used at this facility along with current material safety data sheets and/or certified product data sheets, must be maintained and kept available for review at the time of inspection by the Technical Secretary or his representative. This shall also include input material used but not necessarily purchased and obtained and inventoried from international or domestic suppliers of input/raw material. Information in the purchase orders and/or invoices and shipping records must include the date the materials were shipped, the identity, and the quantity of each material shipped. These records must be retained for a period of not less than five (5) years.

TAPCR 1200-03-09

Compliance Method: Maintain the required recordkeeping as noted.

E3-2. The Permittee shall submit all MSDS and/or Product (Environmental) Data Sheets that accurately provide Density, VOC content, HAP content, and Solid content for all materials used during the reporting period as supplied by the manufacturer in the first semiannual report submittal associated with the issuance of this Title V permit. Subsequent semiannual reports shall include updated MSDS and/or Product (Environmental) Data Sheets when material formulations have changed or there is a "new" coating that was not part of the first submittal. If no changes have occurred to the formulations since the last semiannual submittal, then a statement to that fact will suffice.

TAPCR 1200-03-09

Compliance Method: Semiannual submittal as required by this condition and as specified in **Condition E2(a)(1)**.

E3-3. For Emission Sources 59-0061-01, 03 and 23, recordkeeping of VOCs for compliance/fee purposes and recordkeeping of gaseous HAPs for fee purposes shall include the logs for each VOC/HAP emission source which contain the following information:

Permit Number: 563336

Expiration Date: March 4, 2018

(1) Emissions in tons of each Hazardous Air Pollutant, (2) Emissions in tons of all Hazardous Air Pollutants, (3) Emissions in tons of VOCs excluding exempt compounds as defined in 1200-03-18-.01(26) of the Tennessee Air Pollution Control Regulations. Logs of information in the formats required must be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. The logs are used to account for VOC, VOC HAP, and non-VOC HAP emissions from input material and fuel burning which release emissions in these categories. Records shall also be retained to verify the VOC and HAP content of each material. This may include MSDS, formulation data, or other documentation to establish the VOC and HAP content. These logs must be retained for a period of not less than five (5) years.

LOG 1: Monthly log of VOC and HAP emissions from input materials for compliance and fee purposes

Source:					M	Ionth:	Yea	nr:	
Material Name	Material Usage (gal/month)	Material Density (lb/gal)	VOC Content (lb/gal)	VOC Emissions (ton/month)	HAP 1 Content (lb/gal)	HAP 1 Emissions (ton/month)	HAP 2 Content (lb/gal)	HAP 2 Emissions (ton/month)	Total HAPs Emitted (ton/month)
TOTAL									

This log is for the monthly total of VOC and HAP emissions emitted to the air from various material inputs. Only HAP 1 and HAP 2 are shown in the above table due to space limitations to indicate the first two HAP substances contained in a given material. These tables are to include all HAPs 1, 2, 3, or more contained in each material. HAP emissions are for fee purposes only and VOC emissions are for compliance purposes.

LOG 2: Log for monthly VOC emissions and for 12 consecutive month periods for compliance purposes Source:

Month / Year	VOC Emissions (ton/month)	Total Facility VOC Emissions (*) (tons per 12 consecutive months)

^(*) The Tons per 12 Month value is the sum of the VOC emissions in the 11 months preceding the month just completed + the VOC emissions in the month just completed. This log is the total amount of VOCs emitted to the air on a 12 consecutive month basis.

LOG 3: Log for HAP emissions for fee accounting period

Month / Year	HAP 1 Emissions (ton/month)	HAP 2 Emissions (ton/month)	Total HAP Emissions (ton/month)
July / Year			
June / Year			
Total for 12 months			

This log is the total amount of HAP emissions from a single emission source emitted to the air during the fee annual accounting period (AAP) which runs from July 1 through June 30. Total HAP emissions only have to be determined for this particular 12 month interval. Only HAP 1 and HAP 2 are shown in the above tables due to space limitations to indicate the first two HAP substances contained in a given material. These tables are to include all HAPs 1, 2, 3, or more contained in each material.

LOG 4: Log for facility-wide HAP emissions for fee accounting period

Month / Year	Total HAP Emissions (ton/month)
July / Year	
June / Year	
Total for 12 months	

This log is the total amount of HAP emissions from all emission sources at the facility emitted to the air during the fee annual accounting period (AAP) which runs from July 1 through June 30. Total HAP emissions only have to be determined for this particular 12 month interval.

Source: _

TAPCR 1200-03-09

Compliance Method: Included with the requirement.

E3-4. Record keeping requirements for this facility, including all data and calculations, must be updated and maintained based on the following schedule:

Record Keeping Type Update Requirement

Monthly Log Recorded within 30 days after the end of the month
Weekly Log Recorded within 7 days after the end of the week
Daily Log Recorded within 7 days after the end of the day

TAPCR 1200-03-09

Compliance Method: Maintain the recordkeeping schedule as required.

E3-5. Logs and records specified in this permit shall be made available upon request by the Technical Secretary or his representative and shall be retained for a period of not less than 5 years unless otherwise noted. Logs and records contained in this permit are based on a recommended format. Any logs that have an alternative format may be utilized provided such logs contain the same information that is required. Computer-generated logs are also acceptable. Logs and records are not required to be submitted semiannually unless specified in **Condition E2(a)(1)**.

TAPCR 1200-03-09

Compliance Method: Included with the requirement.

E3-6. Routine maintenance as required to comply with the specified emission limits shall be performed on the air pollution control devices. Monthly logs of maintenance and/or repair for each air pollution control device shall be kept. This includes, but is not limited to, baghouses, cyclones, and other air pollution control devices. The logs shall denote what maintenance and what repair was done, when it was done, by whom, and when problems were rectified denoting date accomplished. Use of computer-generated logs is also acceptable. Each maintenance/repair log must be made available upon request by the Technical Secretary or his representative. Such logs must be maintained for 5 years. Records from these logs are not required to be submitted semiannually unless required in **Condition E2(a)(1)**.

TAPCR 1200-03-09-.02(11)(e)1.(iii)

Compliance Method: Included with the requirement.

E3-7. Upon the malfunction/failure of any emission control device(s) serving this source, the operation of the process(es) served by the device(s) shall be regulated by Chapter 1200-03-20 of the Tennessee Air Pollution Control Regulations.

TAPCR 1200-03-20

Compliance Method: Following the requirements as identified in TAPCR 1200-03-20.

E3-8. Unless otherwise specified, visible emissions from any stack at this facility shall not exhibit greater than twenty percent (20%) opacity, except for one (1) six-minute period in any one (1) hour period, and for no more than four (4) six-minute periods in any twenty-four (24) hour period. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).

TAPCR 1200-03-05-.03(6) and TAPCR 1200-03-05-.01(1)

Compliance Method: The permittee shall assure compliance with the opacity standard by utilizing the opacity matrix dated June 18, 1996, and amended September 12, 2005 (**Attachment 1**).

If the magnitude and frequency of excursions reported by the permittee in the periodic monitoring for emissions is unsatisfactory to the Technical Secretary, this permit may be reopened to impose additional opacity monitoring requirements.

E3-9. The permittee is <u>not</u> required to file an accidental release plan pursuant to Section 112(r) of the Clean Air Act and 1200-03-32 of TAPCR.

TAPCR 1200-03-32

Compliance Method: Following the requirement as identified in TAPCR 1200-03-32.

- E3-10. CAM Plan. This facility is currently subject to regulations under 40 CFR Part 64 (Compliance Assurance Monitoring).
- **E3-11.** This Title V Operating Permit No. 563336 represents the second renewal of the initial Title V Permit No. 548467 issued September 30, 1999, and all subsequent revisions since the first Title V permit renewal.

Compliance Method: None. This condition identifies that this is the second renewal since the initial Title V permit.

E4. MACT Requirements

E4-1. The Permittee (CalsonicKansei North America, Inc.) is subject to 40 CFR 63 Subpart PPPP - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products, including <u>any and/or all applicable</u> emission limitations, notifications, compliance options, records, reports, etc. as referenced below in this condition.

- (a) Plastic parts and products include, but are not limited to, plastic components of the following types of products as well as the products themselves: Motor vehicle parts and accessories for automobiles, trucks, recreational vehicles; sporting and recreational goods; toys; business machines; laboratory and medical equipment; and household and other consumer products. Except as provided in paragraph (c) of this section, the source category to which this subpart applies is the surface coating of any plastic parts or products, as described in paragraph (a)(1) of this section, and it includes the subcategories listed in paragraphs (a)(2) through (5) of this section.
- (1) Surface coating is the application of coating to a substrate using, for example, spray guns or dip tanks. When application of coating to a substrate occurs, then surface coating also includes associated activities, such as surface preparation, cleaning, mixing, and storage. However, these activities do not comprise surface coating if the Permittee is not directly related to the application of the coating. Coating application with handheld, non-refillable aerosol containers, touch-up markers, marking pens, or the application of paper film or plastic film which may be pre-coated with an adhesive by the manufacturer are not coating operations for the purposes of this subpart.
- (2) The general use coating subcategory includes all surface coating operations that are not automotive lamp coating operations, thermoplastic olefin (TPO) coating operations, or assembled on-road vehicle coating operations.
- (3) The automotive lamp coating subcategory includes the surface coating of plastic components of the body of an exterior automotive lamp including, but not limited to, headlamps, tail lamps, turn signals, and marker (clearance) lamps; typical coatings used are reflective argent coatings and clear topcoats. This subcategory does not include the coating of interior automotive lamps, such as dome lamps and instrument panel lamps.
- (4) The TPO coating subcategory includes the surface coating of TPO substrates; typical coatings used are adhesion promoters, color coatings, clear coatings and topcoats. The coating of TPO substrates on fully assembled on-road vehicles is not included in the TPO coating subcategory.
- (5) The assembled on-road vehicle coating subcategory includes surface coating of fully assembled motor vehicles and trailers intended for on-road use, including, but not limited to: automobiles, light-duty trucks, heavy duty trucks, and busses that have been repaired after a collision or otherwise repainted; fleet delivery trucks; and motor homes and other recreational vehicles (including camping trailers and fifth wheels). This subcategory also includes the incidental coating of parts, such as radiator grilles, that are removed from the fully assembled on-road vehicle to facilitate concurrent coating of all parts associated with the vehicle. The assembled on-road vehicle coating subcategory does not include the surface coating of plastic parts prior to their attachment to an on-road vehicle on an original equipment manufacturer's (OEM) assembly line. The assembled on-road vehicle coating subcategory also does not include the use of adhesives, sealants, and caulks used in assembling on-road vehicles. Body fillers used to correct small surface defects and rubbing compounds used to remove surface scratches are not considered coatings subject to this subpart.
- (b) The Permittee is subject to this subpart if the Permittee owns or operates a new, reconstructed, or existing affected source, as defined in §63.4482, that uses 378 liters (100 gallons (gal)) per year, or more, of coatings that contain hazardous air pollutants (HAP) in the surface coating of plastic parts and products defined in paragraph (a) of this section; and that is a major source, is located at a major source, or is part of a major source of emissions of HAP. A major source of HAP emissions is any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit any single HAP at a rate of 9.07 megagrams (Mg) (10 tons) or more per year or any combination of HAP at a rate of 22.68 Mg (25 tons) or more per year. The Permittee does not need to include coatings that

meet the definition of non-HAP coating contained in §63.4581 in determining whether the Permittee uses 378 liters (100 gallons) per year, or more, of coatings in the surface coating of plastic parts and products.

- (c) This subpart does not apply to surface coating or a coating operation that meets any of the criteria of paragraphs (c)(1) through (17) of this section.
- (1) A coating operation conducted at the Permittee's facility where the facility uses only coatings, thinners and other additives, and cleaning materials that contain no organic HAP, as determined according to §63.3941(a).
- (2) Surface coating operations that occur at research or laboratory facilities, or is part of janitorial, building, and facility maintenance operations, or that occur at hobby shops that are operated for noncommercial purposes.
- (3) The surface coating of plastic parts and products performed on-site at installations owned or operated by the Armed Forces of the United States (including the Coast Guard and the National Guard of any such State) or the National Aeronautics and Space Administration, or the surface coating of military munitions manufactured by or for the Armed Forces of the United States (including the Coast Guard and the National Guard of any such State).
- (4) Surface coating where plastic is extruded onto plastic parts or products to form a coating.
- (5) Surface coating of magnet wire.
- (6) In-mold coating operations or gel coating operations in the manufacture of reinforced plastic composite parts that meet the applicability criteria for reinforced plastics composites production (subpart WWWW of this part).
- (7) Surface coating of plastic components of wood furniture that meet the applicability criteria for wood furniture manufacturing (subpart JJ of this part).
- (8) Surface coating of plastic components of large appliances that meet the applicability criteria for large appliance surface coating (subpart NNNN of this part).
- (9) Surface coating of plastic components of metal furniture that meet the applicability criteria for metal furniture surface coating (subpart RRRR of this part).
- (10) Surface coating of plastic components of wood building products that meet the applicability criteria for wood building products surface coating (subpart QQQQ of this part).
- (11) Surface coating of plastic components of aerospace vehicles that meet the applicability criteria for aerospace manufacturing and rework (40 CFR part 63, subpart GG).
- (12) Surface coating of plastic parts intended for use in an aerospace vehicle or component using specialty coatings as defined in appendix A to subpart GG of this part.
- (13) Surface coating of plastic components of ships that meet the applicability criteria for shipbuilding and ship repair (subpart II of this part).
- (14) Surface coating of plastic using a web coating process that meets the applicability criteria for paper and other web coating (subpart JJJJ of this part).
- (15) Surface coating of fiberglass boats or parts of fiberglass boats (including, but not limited to, the use of assembly adhesives) where a facility meets the applicability criteria for boat manufacturing (subpart VVVV of this part), except where the surface coating of the boat is a post-mold coating operation performed on personal watercraft or parts of personal watercraft. This subpart does apply to post-mold coating operations performed on personal watercraft and parts of personal watercraft.

(16) Surface coating of plastic components of automobiles and light-duty trucks that meet the applicability criteria in §63.3082(b) of the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (40 CFR part 63, subpart IIII) at a facility that meets the applicability criteria in §63.3081(b).

(17) Screen printing.

- (d) If the Permittee's facility meets the applicability criteria in §63.3081(b) of the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (40 CFR part 63, subpart IIII) and the Permittee performs surface coating of plastic parts or products that meets both the applicability criteria in §63.3082(c) and the applicability criteria of this subpart, then for the surface coating of any or all of the Permittee's plastic parts or products that meets the applicability criteria in §63.3082(c), the Permittee may choose to comply with the requirements of subpart IIII of this part in lieu of complying with this subpart. Surface coating operations on plastic parts or products (e.g., parts for motorcycles or lawnmowers) not intended for use in automobiles, light-duty trucks, or other motor vehicles as defined in §63.3176 cannot be made part of the Permittee's affected source under subpart IIII of this part.
- (e) If the Permittee owns or operates an affected source that meets the applicability criteria of this subpart and at the same facility the Permittee also performs surface coating that meets the applicability criteria of any other final surface coating NESHAP in this part, the Permittee may choose to comply as specified in paragraph (e)(1), (2), or (3) of this section.
- (1) The Permittee may have each surface coating operation that meets the applicability criteria of a separate NESHAP comply with that NESHAP separately.
- (2) The Permittee may comply with the emission limitation representing the predominant surface coating activity at the Permittee's facility, as determined according to paragraphs (e)(2)(i) and (ii) of this section. However, the Permittee may not establish assembled on-road vehicle or automotive lamp coating operations as the predominant activity. The Permittee must not consider any surface coating activity that is subject to the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (40 CFR part 63, subpart IIII) in determining the predominant surface coating activity at the Permittee's facility.
- (i) If a surface coating operation accounts for 90 percent or more of the surface coating activity at the Permittee's facility (that is, the predominant activity), then compliance with the emission limitations of the predominant activity for all surface coating operations constitutes compliance with these and other applicable surface coating NESHAP. In determining predominant activity, the Permittee must include coating activities that meet the applicability criteria of other surface coating NESHAP and constitute more than 1 percent of total coating activities at the Permittee's facility. Coating activities that meet the applicability criteria of other surface coating NESHAP but comprise less than 1 percent of coating activities need not be included in the determination of predominant activity but must be included in the compliance calculation.
- (ii) The Permittee must use kilogram (kg) (pound (lb)) of solids used as a measure of relative surface coating activity over a representative period of operation. The Permittee may estimate the relative mass of coating solids used from parameters other than coating consumption and mass solids content (e.g., design specifications for the parts or products coated and the number of items produced). The determination of predominant activity must accurately reflect current and projected coating operations and must be verifiable through appropriate documentation. The use of parameters other than coating consumption and mass solids content must be approved by the Administrator. The Permittee may use data for any reasonable time period of at least 1 year in determining the relative amount of coating activity, as long as the Permittee represents the way the source will continue to operate in the future and it is approved by the Administrator. The Permittee must determine the predominant activity at the Permittee's facility and submit the results of that determination with the initial notification required by §63.4510(b). The Permittee must also determine predominant activity annually and include the determination in the next semi-annual compliance report required by §63.4520(a).
- (3) The Permittee may comply with a facility-specific emission limit calculated from the relative amount of coating activity that is subject to each emission limit. If the Permittee elects to comply using the facility-specific emission limit alternative, then compliance with the facility-specific emission limit and the emission limitations in this subpart for all surface coating operations constitutes compliance with this subpart and other applicable surface coating NESHAP. The procedures for calculating the facility-specific emission limit are specified in §63.4490. In calculating a facility-specific emission limit, the Permittee must include coating activities that meet the applicability criteria of other surface coating NESHAP and constitute more than 1 percent of total coating activities at the Permittee's facility. The Permittee must not consider any surface coating activity that is subject to the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (40 CFR part 63, subpart IIII) in determining a facility-specific emission limit for the Permittee's facility. Coating activities that meet the applicability

criteria of other surface coating NESHAP but comprise less than 1 percent of total coating activities need not be included in the calculation of the facility-specific emission limit but must be included in the compliance calculations.

[69 FR 20990, Apr. 19, 2004, as amended at 69 FR 22660, April 26, 2004; 71 FR 76927, Dec. 22, 2006; 72 FR 20237, Apr. 24, 2007]

Pursuant to §63.4482

- (a) This subpart applies to each new, reconstructed, and existing affected source within each of the four subcategories listed in §63.4481(a).
- (b) The affected source is the collection of all of the items listed in paragraphs (b)(1) through (4) of this section that are used for surface coating of plastic parts and products within each subcategory.
- (1) All coating operations as defined in §63.4581;
- (2) All storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed;
- (3) All manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials; and
- (4) All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation.
- (c) An affected source is a new source if it meets the criteria in paragraph (c)(1) of this section and the criteria in either paragraph (c)(2) or (3) of this section.
- (1) The Permittee commenced the construction of the source after December 4, 2002 by installing new coating equipment.
- (2) The new coating equipment is used to coat plastic parts and products at a source where no plastic parts surface coating was previously performed.
- (3) The new coating equipment is used to perform plastic parts and products coating in a subcategory that was not previously performed.
- (d) An affected source is reconstructed if you meet the criteria as defined in §63.2.
- (e) An affected source is existing if it is not new or reconstructed.

Pursuant to §63.4483

The date by which the Permittee must comply with this subpart is called the compliance date. The compliance date for each type of affected source is specified in paragraphs (a) through (c) of this section. The compliance date begins the initial compliance period during which the Permittee conducts the initial compliance demonstration described in §§63.4540, 63.4550, and 63.4560.

- (a) For a new or reconstructed affected source, the compliance date is the applicable date in paragraph (a)(1) or (2) of this section:
- (1) If the initial startup of the Permittee's new or reconstructed affected source is before April 19, 2004, the compliance date is April 19, 2004.
- (2) If the initial startup of the Permittee's new or reconstructed affected source occurs after April 19, 2004, the compliance date is the date of initial startup of the Permittee's affected source.
- (b) For an existing affected source, the compliance date is the date 3 years after April 19, 2004.

(c) For an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP emissions, the compliance date is specified in paragraphs (c)(1) and (2) of this section.

- (1) For any portion of the source that becomes a new or reconstructed affected source subject to this subpart, the compliance date is the date of initial startup of the affected source or April 19, 2004, whichever is later.
- (2) For any portion of the source that becomes an existing affected source subject to this subpart, the compliance date is the date 1 year after the area source becomes a major source or 3 years after April 19, 2004, whichever is later.
- (d) The Permittee must meet the notification requirements in §63.4510 according to the dates specified in that section and in subpart A of this part. Some of the notifications must be submitted before the compliance dates described in paragraphs (a) through (c) of this section.

- (a) For a new or reconstructed affected source, the Permittee must limit organic HAP emissions to the atmosphere from the affected source to the applicable limit specified in paragraphs (a)(1) through (4) of this section, except as specified in paragraph (c) of this section, determined according to the requirements in §63.4541, §63.4551, or §63.4561.
- (1) For each new general use coating affected source, limit organic HAP emissions to no more than 0.16 kg (0.16 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.
- (2) For each new automotive lamp coating affected source, limit organic HAP emissions to no more than 0.26 kg (0.26 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.
- (3) For each new TPO coating affected source, limit organic HAP emissions to no more than 0.22 kg (0.22 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.
- (4) For each new assembled on-road vehicle coating affected source, limit organic HAP emissions to no more than 1.34 kg (1.34 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.
- (b) For an existing affected source, the Permittee must limit organic HAP emissions to the atmosphere from the affected source to the applicable limit specified in paragraphs (b)(1) through (4) of this section, except as specified in paragraph (c) of this section, determined according to the requirements in §63.4541, §63.4551, or §63.4561.
- (1) For each existing general use coating affected source, limit organic HAP emissions to no more than 0.16 kg (0.16 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.
- (2) For each existing automotive lamp coating affected source, limit organic HAP emissions to no more than 0.45 kg (0.45 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.
- (3) For each existing TPO coating affected source, limit organic HAP emissions to no more than 0.26 kg (0.26 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.
- (4) For each existing assembled on-road vehicle coating affected source, limit organic HAP emissions to no more than 1.34 kg (1.34 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.
- (1) For each existing general use coating affected source, limit organic HAP emissions to no more than 0.16 kg (0.16 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.
- (2) For each existing automotive lamp coating affected source, limit organic HAP emissions to no more than 0.45 kg (0.45 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.
- (3) For each existing TPO coating affected source, limit organic HAP emissions to no more than 0.26 kg (0.26 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.

(4) For each existing assembled on-road vehicle coating affected source, limit organic HAP emissions to no more than 1.34 kg (1.34 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.

- (c) If the Permittee's surface coating operations meet the applicability criteria of more than one of the subcategory emission limits specified in paragraphs (a) or (b) of this section, the Permittee may comply separately with each subcategory emission limit or comply using one of the alternatives in paragraph (c)(1) or (2) of this section.
- (1) If the general use or TPO surface coating operations subject to only one of the emission limits specified in paragraphs (a)(1), (a)(3), (b)(1), or (b)(3) of this section account for 90 percent or more of the surface coating activity at the Permittee's facility (*i.e.*, it is the predominant activity at Permittee's facility), then compliance with that emission limitation for all surface coating operations constitutes compliance with the other applicable emission limitations. The Permittee must use kg (lb) of solids used as a measure of relative surface coating activity over a representative period of operation. The Permittee may estimate the relative mass of coating solids used from parameters other than coating consumption and mass solids content (*e.g.*, design specifications for the parts or products coated and the number of items produced). The determination of predominant activity must accurately reflect current and projected coating operations and must be verifiable through appropriate documentation. The use of parameters other than coating consumption and mass solids content must be approved by the Administrator. The Permittee may use data for any reasonable time period of at least 1 year in determining the relative amount of coating activity, as long as the Permittee represents the way the source will continue to operate in the future and is approved by the Administrator. The Permittee must determine the predominant activity at Permittee's facility and submit the results of that determination with the initial notification required by §63.4510(b). Additionally, the Permittee must determine the facility's predominant activity annually and include the determination in the next semi-annual compliance report required by §63.4520(a).
- (2) The Permittee may calculate and comply with a facility-specific emission limit as described in paragraphs (c)(2)(i) through (iii) of this section. If the Permittee elects to comply using the facility-specific emission limit alternative, then compliance with the facility-specific emission limit and the emission limitations in this subpart for all surface coating operations constitutes compliance with this and other applicable surface coating NESHAP. In calculating a facility-specific emission limit, the Permittee must include coating activities that meet the applicability criteria of the other subcategories and constitute more than 1 percent of total coating activities. Coating activities that meet the applicability criteria of other surface coating NESHAP but comprise less than 1 percent of coating activities need not be included in the determination of predominant activity but must be included in the compliance calculation.
- (i) The Permittee is required to calculate the facility-specific emission limit for the Permittee's facility when the Permittee submits the notification of compliance status required in §63.4510(c), and on a monthly basis afterward using the coating data for the relevant 12-month compliance period.
- (ii) Use Equation 1 of this section to calculate the facility-specific emission limit for the Permittee's surface coating operations for each 12-month compliance period.

$$Facility - Specific \ Emission \ Limit = \frac{\displaystyle\sum_{i=1}^{n} (Limit_{i})(Solids_{i})}{\displaystyle\sum_{i=1}^{n} (Solids_{i})} \tag{Eq. 1}$$

Where:

Facility-specific emission limit = Facility-specific emission limit for each 12-month compliance period, kg (lb) organic HAP per kg (lb) coating solids used.

Limit_i = The new source or existing source emission limit applicable to coating operation, i, included in the facility-specific emission limit, converted to kg (lb) organic HAP per kg (lb) coating solids used, if the emission limit is not already in those units. All emission limits included in the facility-specific emission limit must be in the same units.

 $Solids_i = The \ kg \ (lb)$ of solids used in coating operation, i, in the 12-month compliance period that is subject to emission limit, i. The Permittee may estimate the mass of coating solids used from parameters other than coating consumption and

mass solids content (e.g., design specifications for the parts or products coated and the number of items produced). The use of parameters other than coating consumption and mass solids content must be approved by the Administrator.

- n =The number of different coating operations included in the facility-specific emission limit.
- (iii) If the Permittee needs to convert an emission limit in another surface coating NESHAP from kg (lb) organic HAP per liter (gallon) coating solids used to kg (lb) organic HAP per kg (lb) coating solids used, the Permittee must use the default solids density of 1.50 kg solids per liter coating solids (12.5 lb solids per gal solids).

Pursuant to §63.4491

The permittee must include all coatings (as defined in §63.4581), thinners and/or other additives, and cleaning materials used in the affected source when determining whether the organic HAP emission rate is equal to or less than the applicable emission limit in §63.4490. To make this determination, the Permittee must use at least one of the three compliance options listed in paragraphs (a) through (c) of this section. The Permittee may apply any of the compliance options to an individual coating operation, or to multiple coating operations as a group, or to the entire affected source. The Permittee may use different compliance options for different coating operations, or at different times on the same coating operation. The Permittee may employ different compliance options when different coatings are applied to the same part, or when the same coating is applied to different parts. However, the Permittee may not use different compliance options at the same time on the same coating operation. If the Permittee switches between compliance options for any coating operation or group of coating operations, the Permittee must document this switch as required by §63.4530(c), and the Permittee must report it in the next semiannual compliance report required in §63.4520.

- (a) Compliant material option. Demonstrate that the organic HAP content of each coating used in the coating operation(s) is less than or equal to the applicable emission limit in §63.4490, and that each thinner and/or other additive, and cleaning material used contains no organic HAP. The permittee must meet all the requirements of §§63.4540, 63.4541, and 63.4542 to demonstrate compliance with the applicable emission limit using this option.
- (b) *Emission rate without add-on controls option*. Demonstrate that, based on the coatings, thinners and/or other additives, and cleaning materials used in the coating operation(s), the organic HAP emission rate for the coating operation(s) is less than or equal to the applicable emission limit in §63.4490, **calculated as a rolling 12-month emission rate** and **determined** on a monthly basis. The Permittee must meet all the requirements of §§63.4550, 63.4551, and 63.4552 to demonstrate compliance with the emission limit using this option.
- (c) Emission rate with add-on controls option. Demonstrate that, based on the coatings, thinners and/or other additives, and cleaning materials used in the coating operation(s), and the emissions reductions achieved by emission capture systems and add-on controls, the organic HAP emission rate for the coating operation(s) is less than or equal to the applicable emission limit in §63.4490, calculated as a rolling 12-month emission rate and determined on a monthly basis. If the Permittee uses this compliance option, the Permittee must also demonstrate that all emission capture systems and add-on control devices for the coating operation(s) meet the operating limits required in §63.4492, except for solvent recovery systems for which the Permittee conducts liquid-liquid material balances according to §63.4561(j), and that the Permittee meets the work practice standards required in §63.4493. The Permittee must meet all the requirements of §§63.4560 through 63.4568 to demonstrate compliance with the emission limits, operating limits, and work practice standards using this option.

- (a) For any coating operation(s) on which the Permittee uses the compliant material option or the emission rate without addon controls option, the Permittee is not required to meet any operating limits.
- (b) For any controlled coating operation(s) on which the Permittee uses the emission rate with add-on controls option, except those for which the Permittee uses a solvent recovery system and conduct a liquid-liquid material balance according to §63.4561(j), the Permittee must meet the operating limits specified in Table 1 to this subpart. These operating limits apply to the emission capture and control systems on the coating operation(s) for which the Permittee uses this option, and the Permittee must establish the operating limits during the performance test according to the requirements in §63.4567. The Permittee must meet the operating limits at all times after the Permittee establishes them.
- (c) If the Permittee uses an add-on control device other than those listed in Table 1 to this subpart, or wishes to monitor an alternative parameter and comply with a different operating limit, the Permittee must apply to the Administrator for approval of alternative monitoring under §63.8(f).

Pursuant to §63.4493

(a) For any coating operation(s) on which the Permittee uses the compliant material option or the emission rate without addon controls option, the Permittee is not required to meet any work practice standards.

- (b) If the permittee uses the emission rate with add-on controls option, the Permittee must develop and implement a work practice plan to minimize organic HAP emissions from the storage, mixing, and conveying of coatings, thinners and/or other additives, and cleaning materials used in, and waste materials generated by the controlled coating operation(s) for which the Permittee uses this option; or the Permittee must meet an alternative standard as provided in paragraph (c) of this section. The plan must specify practices and procedures to ensure that, at a minimum, the elements specified in paragraphs (b)(1) through (5) of this section are implemented.
- (1) All organic-HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be stored in closed containers.
- (2) Spills of organic-HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be minimized.
- (3) Organic-HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be conveyed from one location to another in closed containers or pipes.
- (4) Mixing vessels which contain organic-HAP-containing coatings and other materials must be closed except when adding to, removing, or mixing the contents.
- (5) Emissions of organic HAP must be minimized during cleaning of storage, mixing, and conveying equipment.
- (c) As provided in §63.6(g), we, the U.S. Environmental Protection Agency, may choose to grant the Permittee permission to use an alternative to the work practice standards in this section.

- (a) The Permittee must be in compliance with the emission limitations in this subpart as specified in paragraphs (a)(1) and (2) of this section.
- (1) Any coating operation(s) for which the Permittee uses the compliant material option or the emission rate without add-on controls option, as specified in §63.4491(a) and (b), must be in compliance with the applicable emission limit in §63.4490 at all times.
- (2) Any coating operation(s) for which the Permittee uses the emission rate with add-on controls option, as specified in §63.4491(c), must be in compliance with the emission limitations as specified in paragraphs (a)(2)(i) through (iii) of this section.
- (i) The coating operation(s) must be in compliance with the applicable emission limit in §63.4490 at all times except during periods of startup, shutdown, and malfunction.
- (ii) The coating operation(s) must be in compliance with the operating limits for emission capture systems and add-on control devices required by §63.4492 at all times except during periods of startup, shutdown, and malfunction, and except for solvent recovery systems for which the Permittee conducts liquid-liquid material balances according to §63.4561(j).
- (iii) The coating operation(s) must be in compliance with the work practice standards in §63.4493 at all times.
- (b) The Permittee must always operate and maintain the Permittee's affected source, including all air pollution control and monitoring equipment the Permittee uses for purposes of complying with this subpart, according to the provisions in §63.6(e)(1)(i).
- (c) If the Permittee's affected source uses an emission capture system and add-on control device, the Permittee must develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3). The plan must address the startup, shutdown, and corrective actions in the event of a malfunction of the emission capture system or the add-on control

device. The plan must also address any coating operation equipment that may cause increased emissions or that would affect capture efficiency if the process equipment malfunctions, such as conveyors that move parts among enclosures.

[69 FR 20990, Apr. 19, 2004, as amended at 71 FR 20465, Apr. 20, 2006]

Pursuant to §63.4501

Table 2 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to the Permittee.

- (a) *General*. The Permittee must submit the notifications in §§63.7(b) and (c), 63.8(f)(4), and 63.9(b) through (e) and (h) that apply to the Permittee by the dates specified in those sections, except as provided in paragraphs (b) and (c) of this section.
- (b) *Initial notification*. The Permittee must submit the initial notification required by §63.9(b) for a new or reconstructed affected source no later than 120 days after initial startup or 120 days after April 19, 2004, whichever is later. For an existing affected source, the Permittee must submit the initial notification no later than 1 year after April 19, 2004. If the Permittee is using compliance with the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (subpart IIII of this part) as provided for under §63.4481(d) to constitute compliance with this subpart for any or all of the Permittee's plastic parts coating operations, then the Permittee must include a statement to this effect in the Permittee's initial notification, and no other notifications are required under this subpart in regard to those plastic parts coating operations. If the Permittee is complying with another NESHAP that constitutes the predominant activity at the Permittee's facility under §63.4481(e)(2) to constitute compliance with this subpart for the Permittee's plastic parts coating operations, then the Permittee must include a statement to this effect in the Permittee's initial notification, and no other notifications are required under this subpart in regard to those plastic parts coating operations.
- (c) *Notification of compliance status*. The Permittee must submit the notification of compliance status required by §63.9(h) no later than 30 calendar days following the end of the initial compliance period described in §63.4540, §63.4550, or §63.4560 that applies to your affected source. The notification of compliance status must contain the information specified in paragraphs (c)(1) through (11) of this section and in §63.9(h).
- (1) Company name and address.
- (2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- (3) Date of the report and beginning and ending dates of the reporting period. The reporting period is the initial compliance period described in §63.4540, §63.4550, or §63.4560 that applies to the Permittee's affected source.
- (4) Identification of the compliance option or options specified in §63.4491 that the Permittee used on each coating operation in the affected source during the initial compliance period.
- (5) Statement of whether or not the affected source achieved the emission limitations for the initial compliance period.
- (6) If the Permittee had a deviation, include the information in paragraphs (c)(6)(i) and (ii) of this section.
- (i) A description and statement of the cause of the deviation.
- (ii) If the Permittee failed to meet the applicable emission limit in §63.4490, include all the calculations the Permittee used to determine the kg (lb) organic HAP emitted per kg (lb) coating solids used. The Permittee does not need to submit information provided by the materials' suppliers or manufacturers, or test reports.
- (7) For each of the data items listed in paragraphs (c)(7)(i) through (iv) of this section that is required by the compliance option(s) the Permittee used to demonstrate compliance with the emission limit, include an example of how the Permittee determined the value, including calculations and supporting data. Supporting data may include a copy of the information provided by the supplier or manufacturer of the example coating or material, or a summary of the results of testing conducted according to §63.4541(a), (b), or (c). The Permittee does not need to submit copies of any test reports.

(i) Mass fraction of organic HAP for one coating, for one thinner and/or other additive, and for one cleaning material.

- (ii) Mass fraction of coating solids for one coating.
- (iii) Density for one coating, one thinner and/or other additive, and one cleaning material, except that if the Permittee uses the compliant material option, only the example coating density is required.
- (iv) The amount of waste materials and the mass of organic HAP contained in the waste materials for which the Permittee is claiming an allowance in Equation 1 of §63.4551.
- (8) The calculation of kg (lb) organic HAP emitted per kg (lb) coating solids used for the compliance option(s) the Permittee used, as specified in paragraphs (c)(8)(i) through (iii) of this section.
- (i) For the compliant material option, provide an example calculation of the organic HAP content for one coating, using Equation 1 of §63.4541.
- (ii) For the emission rate without add-on controls option, provide the calculation of the total mass of organic HAP emissions for each month; the calculation of the total mass of coating solids used each month; and the calculation of the 12-month organic HAP emission rate using Equations 1 and 1A through 1C, 2, and 3, respectively, of §63.4551.
- (iii) For the emission rate with add-on controls option, provide the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month, using Equations 1 and 1A through 1C of §63.4551; the calculation of the total mass of coating solids used each month using Equation 2 of §63.4551; the mass of organic HAP emission reduction each month by emission capture systems and add-on control devices using Equations 1 and 1A through 1D of §63.4561 and Equations 2, 3, and 3A through 3C of §63.4561, as applicable; the calculation of the total mass of organic HAP emissions each month using Equation 4 of §63.4561; and the calculation of the 12-month organic HAP emission rate using Equation 5 of §63.4561.
- (9) For the emission rate with add-on controls option, the Permittee must include the information specified in paragraphs (c)(9)(i) through (iv) of this section, except that the requirements in paragraphs (c)(9)(i) through (iii) of this section do not apply to solvent recovery systems for which the Permittee conducts liquid-liquid material balances according to §63.4561(j).
- (i) For each emission capture system, a summary of the data and copies of the calculations supporting the determination that the emission capture system is a permanent total enclosure (PTE) or a measurement of the emission capture system efficiency. Include a description of the protocol followed for measuring capture efficiency, summaries of any capture efficiency tests conducted, and any calculations supporting the capture efficiency determination. If the Permittee uses the data quality objective (DQO) or lower confidence limit (LCL) approach, the Permittee must also include the statistical calculations to show the Permittee meets the DQO or LCL criteria in appendix A to subpart KK of this part. The permittee does not need to submit complete test reports.
- (ii) A summary of the results of each add-on control device performance test. The permittee does not need to submit complete test reports.
- (iii) A list of each emission capture system's and add-on control device's operating limits and a summary of the data used to calculate those limits.
- (iv) A statement of whether or not the permittee developed and implemented the work practice plan required by §63.4493.
- (10) If the permittee is complying with a single emission limit representing the predominant activity under 63.4490(c)(1), include the calculations and supporting information used to demonstrate that this emission limit represents the predominant activity as specified in 63.4490(c)(1).
- (11) If the permittee is complying with a facility-specific emission limit under §63.4490(c)(2), include the calculation of the facility-specific emission limit and any supporting information as specified in §63.4490(c)(2).
- [69 FR 20990, Apr. 19, 2004, as amended at 69 FR 22661, Apr. 26, 2004]

Expiration Date: March 4, 2018

Pursuant to §63.4520

Permit Number: 563336

(a) Semiannual compliance reports. The Permittee must submit semiannual compliance reports for each affected source according to the requirements of paragraphs (a)(1) through (7) of this section. The semiannual compliance reporting requirements may be satisfied by reports required under other parts of the Clean Air Act (CAA), as specified in paragraph (a)(2) of this section.

- (1) Dates. Unless the Administrator or Technical Secretary has approved or agreed to a different schedule for submission of reports under §63.10(a), the Permittee must prepare and submit each semiannual compliance report according to the dates specified in paragraphs (a)(1)(i) through (iv) of this section. The Technical Secretary has specified the MACT semiannual reporting periods in accordance with Condition E2(a)(4) of this permit. Note that the information reported for each of the months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.
- (i) The first semiannual compliance report must cover the first semiannual reporting period which begins the day after the end of the initial compliance period described in §63.4540, §63.4550, or §63.4560 that applies to the Permittee's affected source and ends on June 30 or December 31, whichever date is the first date following the end of the initial compliance period.
- (ii) Each subsequent semiannual compliance report must cover the subsequent semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.
- (iii) Each semiannual compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.
- (iv) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), the Permittee may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the date specified in paragraph (a)(1)(iii) of this section.
- (2) Inclusion with title V report. Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a semiannual compliance report pursuant to this section along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the semiannual compliance report includes all required information concerning deviations from any emission limitation in this subpart, its submission will be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a semiannual compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permitting authority.
- (3) General requirements. The semiannual compliance report must contain the information specified in paragraphs (a)(3)(i) through (vii) of this section, and the information specified in paragraphs (a)(4) through (7) and (c)(1) of this section that is applicable to the Permittee's affected source.
- (i) Company name and address.
- (ii) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- (iii) Date of report and beginning and ending dates of the reporting period. The reporting period is the 6-month period ending on June 30 or December 31. Note that the information reported for each of the 6 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.
- (iv) Identification of the compliance option or options specified in §63.4491 that the Permittee used on each coating operation during the reporting period. If the Permittee switched between compliance options during the reporting period, the Permittee must report the beginning and ending dates for each option the Permittee used.
- (v) If the Permittee used the emission rate without add-on controls or the emission rate with add-on controls compliance option (§63.4491(b) or (c)), the calculation results for each rolling 12-month organic HAP emission rate during the 6-month reporting period.

(vi) If the Permittee used the predominant activity alternative (§63.4490(c)(1)), include the annual determination of predominant activity if it was not included in the previous semi-annual compliance report.

- (vii) If the Permittee used the facility-specific emission limit alternative (§63.4490(c)(2)), include the calculation of the facility-specific emission limit for each 12-month compliance period during the 6-month reporting period.
- (4) *No deviations*. If there were no deviations from the emission limitations in §§63.4490, 63.4492, and 63.4493 that apply to you, the semiannual compliance report must include a statement that there were no deviations from the emission limitations during the reporting period. If you used the emission rate with add-on controls option and there were no periods during which the continuous parameter monitoring systems (CPMS) were out-of-control as specified in §63.8(c)(7), the semiannual compliance report must include a statement that there were no periods during which the CPMS were out-of-control during the reporting period.
- 5) Deviations: Compliant material option. If the Permittee used the compliant material option and there was a deviation from the applicable organic HAP content requirements in §63.4490, the semiannual compliance report must contain the information in paragraphs (a)(5)(i) through (iv) of this section.
- (i) Identification of each coating used that deviated from the applicable emission limit, and each thinner and/or other additive, and cleaning material used that contained organic HAP, and the dates and time periods each was used.
- (ii) The calculation of the organic HAP content (using Equation 1 of §63.4541) for each coating identified in paragraph (a)(5)(i) of this section. The Permittee does not need to submit background data supporting this calculation (*e.g.*, information provided by coating suppliers or manufacturers, or test reports).
- (iii) The determination of mass fraction of organic HAP for each thinner and/or other additive, and cleaning material identified in paragraph (a)(5)(i) of this section. The Permittee does not need to submit background data supporting this calculation (e.g., information provided by material suppliers or manufacturers, or test reports).
- (iv) A statement of the cause of each deviation.
- (6) Deviations: Emission rate without add-on controls option. If the Permittee used the emission rate without add-on controls option and there was a deviation from the applicable emission limit in §63.4490, the semiannual compliance report must contain the information in paragraphs (a)(6)(i) through (iii) of this section.
- (i) The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit in §63.4490.
- (ii) The calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred. The Permittee must submit the calculations for Equations 1, 1A through 1C, 2, and 3 of §63.4551; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to §63.4551(e)(4). The Permittee does not need to submit background data supporting these calculations (*e.g.*, information provided by materials suppliers or manufacturers, or test reports).
- (iii) A statement of the cause of each deviation.
- (7) Deviations: Emission rate with add-on controls option. If the Permittee used the emission rate with add-on controls option and there was a deviation from an emission limitation (including any periods when emissions bypassed the add-on control device and were diverted to the atmosphere), the semiannual compliance report must contain the information in paragraphs (a)(7)(i) through (xiv) of this section. This includes periods of startup, shutdown, and malfunction during which deviations occurred.
- (i) The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit in §63.4490.
- (ii) The calculations used to determine the 12-month organic HAP emission rate for each compliance period in which a deviation occurred. The Permittee must provide the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 1 and 1A through 1C of §63.4551;

and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to §63.4551(e)(4); the calculation of the total mass of coating solids used each month using Equation 2 of §63.4551; the calculation of the mass of organic HAP emission reduction each month by emission capture systems and add-on control devices using Equations 1 and 1A through 1D of §63.4561, and Equations 2, 3, and 3A through 3C of §63.4561, as applicable; the calculation of the total mass of organic HAP emissions each month using Equation 4 of §63.4561; and the calculation of the 12-month organic HAP emission rate using Equation 5 of §63.4561. The Permittee does not need to submit the background data supporting these calculations (*e.g.*, information provided by materials suppliers or manufacturers, or test reports).

- (iii) The date and time that each malfunction started and stopped.
- (iv) A brief description of the CPMS.
- (v) The date of the latest CPMS certification or audit.
- (vi) The date and time that each CPMS was inoperative, except for zero (low-level) and high-level checks.
- (vii) The date, time, and duration that each CPMS was out-of-control, including the information in §63.8(c)(8).
- (viii) The date and time period of each deviation from an operating limit in Table 1 to this subpart; date and time period of any bypass of the add-on control device; and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.
- (ix) A summary of the total duration of each deviation from an operating limit in Table 1 to this subpart and each bypass of the add-on control device during the semiannual reporting period, and the total duration as a percent of the total source operating time during that semiannual reporting period.
- (x) A breakdown of the total duration of the deviations from the operating limits in Table 1 of this subpart and bypasses of the add-on control device during the semiannual reporting period into those that were due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.
- (xi) A summary of the total duration of CPMS downtime during the semiannual reporting period and the total duration of CPMS downtime as a percent of the total source operating time during that semiannual reporting period.
- (xii) A description of any changes in the CPMS, coating operation, emission capture system, or add-on control device since the last semiannual reporting period.
- (xiii) For each deviation from the work practice standards, a description of the deviation, the date and time period of the deviation, and the actions the Permittee took to correct the deviation.
- (xiv) A statement of the cause of each deviation.
- (b) *Performance test reports*. If the Permittee uses the emission rate with add-on controls option, the Permittee must submit reports of performance test results for emission capture systems and add-on control devices no later than 60 days after completing the tests as specified in §63.10(d)(2).
- (c) Startup, shutdown, malfunction reports. If the Permittee used the emission rate with add-on controls option and the Permittee had a startup, shutdown, or malfunction during the semiannual reporting period, the Permittee must submit the reports specified in paragraphs (c)(1) and (2) of this section.
- (1) If the Permittee's actions were consistent with the Permittee's startup, shutdown, and malfunction plan, the Permittee must include the information specified in §63.10(d) in the semiannual compliance report required by paragraph (a) of this section.
- (2) If the Permittee's actions were not consistent with the Permittee's startup, shutdown, and malfunction plan, the Permittee must submit an immediate startup, shutdown, and malfunction report as described in paragraphs (c)(2)(i) and (ii) of this section.

(i) The Permittee must describe the actions taken during the event in a report delivered by facsimile, telephone, or other means to the Administrator within 2 working days after starting actions that are inconsistent with the plan.

(ii) The Permittee must submit a letter to the Administrator within 7 working days after the end of the event, unless the Permittee has made alternative arrangements with the Administrator as specified in §63.10(d)(5)(ii). The letter must contain the information specified in §63.10(d)(5)(ii).

Pursuant to §63.4530

The Permittee must collect and keep records of the data and information specified in this section. Failure to collect and keep these records is a deviation from the applicable standard.

- (a) A copy of each notification and report that the Permittee submitted to comply with this subpart, and the documentation supporting each notification and report. If the Permittee is using the predominant activity alternative under §63.4490(c), the Permittee must keep records of the data and calculations used to determine the predominant activity. If the Permittee is using the facility-specific emission limit alternative under §63.4490(c), the Permittee must keep records of the data used to calculate the facility-specific emission limit for the initial compliance demonstration. The Permittee must also keep records of any data used in each annual predominant activity determination and in the calculation of the facility-specific emission limit for each 12-month compliance period included in the semi-annual compliance reports.
- (b) A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density for each coating, thinner and/or other additive, and cleaning material, and the mass fraction of coating solids for each coating. If the Permittee conducted testing to determine mass fraction of organic HAP, density, or mass fraction of coating solids, the Permittee must keep a copy of the complete test report. If the Permittee uses information provided to the Permittee by the manufacturer or supplier of the material that was based on testing, the Permittee must keep the summary sheet of results provided to the Permittee by the manufacturer or supplier. The Permittee is not required to obtain the test report or other supporting documentation from the manufacturer or supplier.
- (c) For each compliance period, the records specified in paragraphs (c)(1) through (4) of this section.
- (1) A record of the coating operations on which the Permittee used each compliance option and the time periods (beginning and ending dates and times) for each option the Permittee used.
- (2) For the compliant material option, a record of the calculation of the organic HAP content for each coating, using Equation 1 of §63.4541.
- (3) For the emission rate without add-on controls option, a record of the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 1, 1A through 1C, and 2 of §63.4551 and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to §63.4551(e)(4); the calculation of the total mass of coating solids used each month using Equation 2 of §63.4551; and the calculation of each 12-month organic HAP emission rate using Equation 3 of §63.4551.
- (4) For the emission rate with add-on controls option, records of the calculations specified in paragraphs (c)(4)(i) through (v) of this section.
- (i) The calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 1 and 1A through 1C of §63.4551; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to §63.4551(e)(4);
- (ii) The calculation of the total mass of coating solids used each month using Equation 2 of §63.4551;
- (iii) The calculation of the mass of organic HAP emission reduction by emission capture systems and add-on control devices using Equations 1 and 1A through 1D of §63.4561 and Equations 2, 3, and 3A through 3C of §63.4561, as applicable;
- (iv) The calculation of each month's organic HAP emission rate using Equation 4 of §63.4561; and
- (v) The calculation of each 12-month organic HAP emission rate using Equation 5 of §63.4561.

(d) A record of the name and mass of each coating, thinner and/or other additive, and cleaning material used during each compliance period. If the Permittee is using the compliant material option for all coatings at the source, the Permittee may maintain purchase records for each material used rather than a record of the mass used.

- (e) A record of the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each compliance period.
- (f) A record of the mass fraction of coating solids for each coating used during each compliance period.
- (g) If the Permittee uses an allowance in Equation 1 of §63.4551 for organic HAP contained in waste materials sent to or designated for shipment to a treatment, storage, and disposal facility (TSDF) according to §63.4551(e)(4), the Permittee must keep records of the information specified in paragraphs (g)(1) through (3) of this section.
- (1) The name and address of each TSDF to which the Permittee sent waste materials for which the Permittee uses an allowance in Equation 1 of §63.4551, a statement of which subparts under 40 CFR parts 262, 264, 265, and 266 apply to the facility; and the date of each shipment.
- (2) Identification of the coating operations producing waste materials included in each shipment and the month or months in which the Permittee used the allowance for these materials in Equation 1 of §63.4551.
- (3) The methodology used in accordance with §63.4551(e)(4) to determine the total amount of waste materials sent to or the amount collected, stored, and designated for transport to a TSDF each month; and the methodology to determine the mass of organic HAP contained in these waste materials. This must include the sources for all data used in the determination, methods used to generate the data, frequency of testing or monitoring, and supporting calculations and documentation, including the waste manifest for each shipment.
- (h) The Permittee must keep records of the date, time, and duration of each deviation.
- (i) If the Permittee uses the emission rate with add-on controls option, the permittee must keep the records specified in paragraphs (i)(1) through (8) of this section.
- (1) For each deviation, a record of whether the deviation occurred during a period of startup, shutdown, or malfunction.
- (2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.
- (3) The records required to show continuous compliance with each operating limit specified in Table 1 to this subpart that applies to the Permittee.
- (4) For each capture system that is a PTE, the data and documentation the Permittee used to support a determination that the capture system meets the criteria in Method 204 of appendix M to 40 CFR part 51 for a PTE and has a capture efficiency of 100 percent, as specified in §63.4565(a).
- (5) For each capture system that is not a PTE, the data and documentation the Permittee used to determine capture efficiency according to the requirements specified in §§63.4564 and 63.4565(b) through (e), including the records specified in paragraphs (i)(5)(i) through (iii) of this section that apply to the Permittee.
- (i) Records for a liquid-to-uncaptured gas protocol using a temporary total enclosure or building enclosure. Records of the mass of total volatile hydrocarbon (TVH) as measured by Method 204A or 204F of appendix M to 40 CFR part 51 for each material used in the coating operation, and the total TVH for all materials used during each capture efficiency test run, including a copy of the test report. Records of the mass of TVH emissions not captured by the capture system that exited the temporary total enclosure or building enclosure during each capture efficiency test run, as measured by Method 204D or 204E of appendix M to 40 CFR part 51, including a copy of the test report. Records documenting that the enclosure used for the capture efficiency test met the criteria in Method 204 of appendix M to 40 CFR part 51 for either a temporary total enclosure or a building enclosure.

(ii) Records for a gas-to-gas protocol using a temporary total enclosure or a building enclosure. Records of the mass of TVH emissions captured by the emission capture system as measured by Method 204B or 204C of appendix M to 40 CFR part 51 at the inlet to the add-on control device, including a copy of the test report. Records of the mass of TVH emissions not captured by the capture system that exited the temporary total enclosure or building enclosure during each capture efficiency test run as measured by Method 204D or 204E of appendix M to 40 CFR part 51, including a copy of the test report. Records documenting that the enclosure used for the capture efficiency test met the criteria in Method 204 of appendix M to 40 CFR part 51 for either a temporary total enclosure or a building enclosure.

- (iii) *Records for an alternative protocol*. Records needed to document a capture efficiency determination using an alternative method or protocol as specified in §63.4565(e), if applicable.
- (6) The records specified in paragraphs (i)(6)(i) and (ii) of this section for each add-on control device organic HAP destruction or removal efficiency determination as specified in §63.4566.
- (i) Records of each add-on control device performance test conducted according to §§63.4564 and 63.4566.
- (ii) Records of the coating operation conditions during the add-on control device performance test showing that the performance test was conducted under representative operating conditions.
- (7) Records of the data and calculations the Permittee used to establish the emission capture and add-on control device operating limits as specified in §63.4567 and to document compliance with the operating limits as specified in Table 1 to this subpart.
- (8) A record of the work practice plan required by §63.4493 and documentation that the Permittee is implementing the plan on a continuous basis.

Pursuant to §63.4531

- (a) The Permittee's records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1). Where appropriate, the records may be maintained as electronic spreadsheets or as a database.
- (b) As specified in §63.10(b)(1), the Permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- (c) The Permittee must keep each record on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to §63.10(b)(1). The Permittee may keep the records off-site for the remaining 3 years.

Pursuant to §63.4540

The Permittee must complete the initial compliance demonstration for the initial compliance period according to the requirements in §63.4541. The initial compliance period begins on the applicable compliance date specified in §63.4483 and ends on the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through that month plus the next 12 months. The initial compliance demonstration includes the calculations according to §63.4541 and supporting documentation showing that during the initial compliance period, the Permittee used no coating with an organic HAP content that exceeded the applicable emission limit in §63.4490, and that the Permittee used no thinners and/or other additives, or cleaning materials that contained organic HAP as determined according to §63.4541(a).

Pursuant to §63.4541

The Permittee may use the compliant material option for any individual coating operation, for any group of coating operations in the affected source, or for all the coating operations in the affected source. The Permittee must use either the emission rate without add-on controls option or the emission rate with add-on controls option for any coating operation in the affected source for which the Permittee does not use this option. To demonstrate initial compliance using the compliant material option, the coating operation or group of coating operations must use no coating with an organic HAP content that exceeds the applicable emission limits in §63.4490 and must use no thinner and/or other additive, or cleaning material that contains organic HAP as determined according to this section. Any coating operation for which the Permittee uses the compliant material option is not required to meet the operating limits or work practice standards required in §\$63.4492 and 63.4493, respectively. The Permittee must conduct a separate initial compliance demonstration for each general use coating, TPO coating, automotive lamp coating, and assembled on-road vehicle coating affected source unless the Permittee is demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.4490(c). If the Permittee is demonstrating compliance with a predominant activity or facility-specific emission limit as provided in

§63.4490(c), the Permittee must demonstrate that all coating operations included in the predominant activity determination or calculation of the facility-specific emission limit comply with that limit. The permittee must meet all the requirements of this section. Use the procedures in this section on each coating, thinner and/or other additive, and cleaning material in the condition it is in when it is received from its manufacturer or supplier and prior to any alteration. The Permittee does not need to redetermine the organic HAP content of coatings, thinners and/or other additives, and cleaning materials that are reclaimed on-site (or reclaimed off-site if the Permittee has documentation showing that the Permittee received back the exact same materials that were sent off-site) and reused in the coating operation for which the Permittee uses the compliant material option, provided these materials in their condition as received were demonstrated to comply with the compliant material option.

- (a) Determine the mass fraction of organic HAP for each material used. The Permittee must determine the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during the compliance period by using one of the options in paragraphs (a)(1) through (5) of this section.
- (1) Method 311 (appendix A to 40 CFR part 63). The Permittee may use Method 311 for determining the mass fraction of organic HAP. Use the procedures specified in paragraphs (a)(1)(i) and (ii) of this section when performing a Method 311 test.
- (i) Count each organic HAP that is measured to be present at 0.1 percent by mass or more for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is measured to be 0.5 percent of the material by mass, the Permittee does not have to count it. Express the mass fraction of each organic HAP the Permittee counts as a value truncated to four places after the decimal point (e.g., 0.3791).
- (ii) Calculate the total mass fraction of organic HAP in the test material by adding up the individual organic HAP mass fractions and truncating the result to three places after the decimal point (e.g., 0.763).
- (2) Method 24 (appendix A to 40 CFR part 60). For coatings, the Permittee may use Method 24 to determine the mass fraction of nonaqueous volatile matter and use that value as a substitute for mass fraction of organic HAP. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, the Permittee may use the alternative method contained in appendix A to this subpart, rather than Method 24. The Permittee may use the volatile fraction that is emitted, as measured by the alternative method in appendix A to this subpart, as a substitute for the mass fraction of organic HAP.
- (3) Alternative method. The Permittee may use an alternative test method for determining the mass fraction of organic HAP once the Administrator has approved it. The Permittee must follow the procedure in §63.7(f) to submit an alternative test method for approval.
- (4) Information from the supplier or manufacturer of the material. The Permittee may rely on information other than that generated by the test methods specified in paragraphs (a)(1) through (3) of this section, such as manufacturer's formulation data, if it represents each organic HAP that is present at 0.1 percent by mass or more for OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is 0.5 percent of the material by mass, the Permittee does not have to count it. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, the Permittee may rely on manufacturer's data that expressly states the organic HAP or volatile matter mass fraction emitted. If there is a disagreement between such information and results of a test conducted according to paragraphs (a)(1) through (3) of this section, then the test method results will take precedence unless, after consultation the Permittee demonstrates to the satisfaction of the enforcement agency that the formulation data are correct.
- (5) Solvent blends. Solvent blends may be listed as single components for some materials in data provided by manufacturers or suppliers. Solvent blends may contain organic HAP which must be counted toward the total organic HAP mass fraction of the materials. When test data and manufacturer's data for solvent blends are not available, the Permittee may use the default values for the mass fraction of organic HAP in these solvent blends listed in Table 3 or 4 to this subpart. If the Permittee uses the tables, the Permittee must use the values in Table 3 for all solvent blends that match Table 3 entries according to the instructions for Table 3, and the Permittee may use Table 4 only if the solvent blends in the materials the Permittee uses do not match any of the solvent blends in Table 3 and the Permittee knows only whether the blend is aliphatic or aromatic. However, if the results of a Method 311 (appendix A to 40 CFR part 63) test indicate higher values than those listed on Table 3 or 4 to this subpart, the Method 311 results will take precedence unless, after consultation the Permittee demonstrates to the satisfaction of the enforcement agency that the formulation data are correct.

(b) Determine the mass fraction of coating solids for each coating. The Permittee must determine the mass fraction of coating solids (kg (lb) of coating solids per kg (lb) of coating) for each coating used during the compliance period by a test, by information provided by the supplier or the manufacturer of the material, or by calculation, as specified in paragraphs (b)(1) through (3) of this section.

- (1) Method 24 (appendix A to 40 CFR part 60). Use Method 24 for determining the mass fraction of coating solids. For reactive adhesives in which some of the liquid fraction reacts to form solids, the Permittee may use the alternative method contained in appendix A to this subpart, rather than Method 24, to determine the mass fraction of coating solids.
- (2) Alternative method. The Permittee may use an alternative test method for determining the solids content of each coating once the Administrator has approved it. The Permittee must follow the procedure in §63.7(f) to submit an alternative test method for approval.
- (3) Information from the supplier or manufacturer of the material. The Permittee may obtain the mass fraction of coating solids for each coating from the supplier or manufacturer. If there is disagreement between such information and the test method results, then the test method results will take precedence unless, after consultation the Permittee demonstrates to the satisfaction of the enforcement agency that the formulation data are correct.
- (c) Calculate the organic HAP content of each coating. Calculate the organic HAP content, kg (lb) organic HAP emitted per kg (lb) coating solids used, of each coating used during the compliance period using Equation 1 of this section:

$$H_c = \frac{W_c}{S_c} \qquad (Eq. 1)$$

Where:

H_c = Organic HAP content of the coating, kg (lb) of organic HAP emitted per kg (lb) coating solids used.

 $W_c = Mass$ fraction of organic HAP in the coating, kg organic HAP per kg coating, determined according to paragraph (a) of this section.

- S_c = Mass fraction of coating solids, kg coating solids per kg coating, determined according to paragraph (b) of this section.
- (d) Compliance demonstration. The calculated organic HAP content for each coating used during the initial compliance period must be less than or equal to the applicable emission limit in §63.4490; and each thinner and/or other additive, and cleaning material used during the initial compliance period must contain no organic HAP, determined according to paragraph (a) of this section. The Permittee must keep all records required by §§63.4530 and 63.4531. As part of the notification of compliance status required in §63.4510, the Permittee must identify the coating operation(s) for which the Permittee used the compliant material option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because the Permittee used no coatings for which the organic HAP content exceeded the applicable emission limit in §63.4490, and the Permittee used no thinners and/or other additives, or cleaning materials that contained organic HAP, determined according to the procedures in paragraph (a) of this section.

Pursuant to §63.4541

- (a) For each compliance period to demonstrate continuous compliance, the Permittee must use no coating for which the organic HAP content (determined using Equation 1 of §63.4541) exceeds the applicable emission limit in §63.4490, and use no thinner and/or other additive, or cleaning material that contains organic HAP, determined according to §63.4541(a). A compliance period consists of 12 months. Each month, after the end of the initial compliance period described in §63.4540, is the end of a compliance period consisting of that month and the preceding 11 months. If the Permittee is complying with a facility-specific emission limit under §63.4490(c), the Permittee must also perform the calculation using Equation 1 in §63.4490(c)(2) on a monthly basis using the data from the previous 12 months of operation.
- (b) If the Permittee chooses to comply with the emission limitations by using the compliant material option, the use of any coating, thinner and/or other additive, or cleaning material that does not meet the criteria specified in paragraph (a) of this section is a deviation from the emission limitations that must be reported as specified in §§63.4510(c)(6) and 63.4520(a)(5).

(c) As part of each semiannual compliance report required by §63.4520, the Permittee must identify the coating operation(s) for which the Permittee used the compliant material option. If there were no deviations from the applicable emission limit in §63.4490, submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because the Permittee used no coatings for which the organic HAP content exceeded the applicable emission limit in §63.4490, and the Permittee used no thinner and/or other additive, or cleaning material that contained organic HAP, determined according to §63.4541(a).

(d) The Permittee must maintain records as specified in §§63.4530 and 63.4531.

Pursuant to §63.4550

The Permittee must complete the initial compliance demonstration for the initial compliance period according to the requirements of §63.4551. The initial compliance period begins on the applicable compliance date specified in §63.4483 and ends on the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through the end of that month plus the next 12 months. The Permittee must determine the mass of organic HAP emissions and mass of coating solids used each month and then calculate an organic HAP emission rate at the end of the initial compliance period. The initial compliance demonstration includes the calculations according to §63.4551 and supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the applicable emission limit in §63.4490.

Pursuant to §63.4551

The Permittee may use the emission rate without add-on controls option for any individual coating operation, for any group of coating operations in the affected source, or for all the coating operations in the affected source. The Permittee must use either the compliant material option or the emission rate with add-on controls option for any coating operation in the affected source for which the Permittee does not use this option. To demonstrate initial compliance using the emission rate without add-on controls option, the coating operation or group of coating operations must meet the applicable emission limit in §63.4490, but is not required to meet the operating limits or work practice standards in §§63.4492 and 63.4493, respectively. The Permittee must conduct a separate initial compliance demonstration for each general use, TPO, automotive lamp, and assembled on-road vehicle coating operation unless the Permittee is demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.4490(c). If the Permittee is demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.4490(c), the Permittee must demonstrate that all coating operations included in the predominant activity determination or calculation of the facility-specific emission limit comply with that limit. The Permittee must meet all the requirements of this section. When calculating the organic HAP emission rate according to this section, do not include any coatings, thinners and/or other additives, or cleaning materials used on coating operations for which the Permittee uses the compliant material option or the emission rate with add-on controls option. The Permittee does not need to redetermine the mass of organic HAP in coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site (or reclaimed off-site if the Permittee has documentation showing that the Permittee received back the exact same materials that were sent off-site) and reused in the coating operation for which the Permittee uses the emission rate without add-on controls option. If the Permittee uses coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site, the amount of each used in a month may be reduced by the amount of each that is reclaimed. That is, the amount used may be calculated as the amount consumed to account for materials that are reclaimed.

- (a) Determine the mass fraction of organic HAP for each material. Determine the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each month according to the requirements in §63.4541(a).
- (b) Determine the mass fraction of coating solids. Determine the mass fraction of coating solids (kg (lb) of coating solids per kg (lb) of coating) for each coating used during each month according to the requirements in §63.4541(b).
- (c) Determine the density of each material. Determine the density of each liquid coating, thinner and/or other additive, and cleaning material used during each month from test results using ASTM Method D1475–98, "Standard Test Method for Density of Liquid Coatings, Inks, and Related Products" (incorporated by reference, see §63.14), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM Method D1475–98 and other such information sources, the test results will take precedence unless, after consultation the Permittee demonstrates to the satisfaction of the enforcement agency that the formulation data are correct. If the Permittee purchases materials or monitor consumption by weight instead of volume, the Permittee does not need to determine material density. Instead, the Permittee may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, 1C, and 2 of this section.

(d) Determine the volume of each material used. Determine the volume (liters) of each coating, thinner and/or other additive, and cleaning material used during each month by measurement or usage records. If the Permittee purchases materials or monitor consumption by weight instead of volume, the Permittee does not need to determine the volume of each material used. Instead, the Permittee may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, 1C, and 2 of this section.

(e) Calculate the mass of organic HAP emissions. The mass of organic HAP emissions is the combined mass of organic HAP contained in all coatings, thinners and/or other additives, and cleaning materials used during each month minus the organic HAP in certain waste materials. Calculate the mass of organic HAP emissions using Equation 1 of this section.

$$H_e = A + B + C - R_w \qquad (Eq. 1)$$

Where:

H_e = Total mass of organic HAP emissions during the month, kg.

A = Total mass of organic HAP in the coatings used during the month, kg, as calculated in Equation 1A of this section.

B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg, as calculated in Equation 1B of this section.

C = Total mass of organic HAP in the cleaning materials used during the month, kg, as calculated in Equation 1C of this section.

 R_w = Total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during the month, kg, determined according to paragraph (e)(4) of this section. (The Permittee may assign a value of zero to R_w if the Permittee does not wish to use this allowance.)

(1) Calculate the kg organic HAP in the coatings used during the month using Equation 1A of this section:

$$A = \sum_{i=1}^{m} (Vol_{e,i}) (D_{e,i}) (W_{e,i}) \qquad (Eq. 1A)$$

Where:

A = Total mass of organic HAP in the coatings used during the month, kg.

 $Vol_{c,i}$ = Total volume of coating, i, used during the month, liters.

 $D_{c,i}$ = Density of coating, i, kg coating per liter coating.

 $W_{c,i}$ = Mass fraction of organic HAP in coating, i, kg organic HAP per kg coating. For reactive adhesives as defined in §63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.

m = Number of different coatings used during the month.

(2) Calculate the kg of organic HAP in the thinners and/or other additives used during the month using Equation 1B of this section:

$$B = \sum_{i=1}^{n} (Vol_{t,j}) (D_{t,j}) (W_{t,j}) \qquad (Eq. 1B)$$

Where:

B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg.

 $Vol_{t,j}$ = Total volume of thinner and/or other additive, j, used during the month, liters.

 $D_{t,j}$ = Density of thinner and/or other additive, j, kg per liter.

 $W_{t,j}$ = Mass fraction of organic HAP in thinner and/or other additive, j, kg organic HAP per kg thinner and/or other additive. For reactive adhesives as defined in §63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.

n = Number of different thinners and/or other additives used during the month.

(3) Calculate the kg organic HAP in the cleaning materials used during the month using Equation 1C of this section:

$$C = \sum_{k=1}^{p} (Vol_{s,k}) (\mathbb{D}_{s,k}) (W_{s,k}) \qquad (Eq. 1C)$$

Where:

C = Total mass of organic HAP in the cleaning materials used during the month, kg.

 $Vol_{s,k}$ = Total volume of cleaning material, k, used during the month, liters.

 $D_{s,k}$ = Density of cleaning material, k, kg per liter.

W_{s,k}= Mass fraction of organic HAP in cleaning material, k, kg organic HAP per kg material.

p = Number of different cleaning materials used during the month.

- (4) If the Permittee chooses to account for the mass of organic HAP contained in waste materials sent or designated for shipment to a hazardous waste TSDF in Equation 1 of this section, then the Permittee must determine the mass according to paragraphs (e)(4)(i) through (iv) of this section.
- (i) The Permittee may only include waste materials in the determination that are generated by coating operations in the affected source for which the Permittee uses Equation 1 of this section and that will be treated or disposed of by a facility that is regulated as a TSDF under 40 CFR part 262, 264, 265, or 266. The TSDF may be either off-site or on-site. The Permittee may not include organic HAP contained in wastewater.
- (ii) The Permittee must determine either the amount of the waste materials sent to a TSDF during the month or the amount collected and stored during the month and designated for future transport to a TSDF. Do not include in the Permittee's determination any waste materials sent to a TSDF during a month if the Permittee has already included them in the amount collected and stored during that month or a previous month.
- (iii) Determine the total mass of organic HAP contained in the waste materials specified in paragraph (e)(4)(ii) of this section.
- (iv) The Permittee must document the methodology the Permittee uses to determine the amount of waste materials and the total mass of organic HAP they contain, as required in §63.4530(g). If waste manifests include this information, they may be used as part of the documentation of the amount of waste materials and mass of organic HAP contained in them.
- (f) Calculate the total mass of coating solids used. Determine the total mass of coating solids used, kg, which is the combined mass of coating solids for all the coatings used during each month, using Equation 2 of this section:

$$M_{st} = \sum_{i=1}^{m} (\operatorname{Vol}_{c,i}) (D_{c,i}) (M_{s,i})$$
 (Eq. 2)

Where:

 M_{st} = Total mass of coating solids used during the month, kg.

 $Vol_{c,i} = Total \ volume \ of \ coating, \ i, \ used \ during \ the \ month, \ liters.$

 $D_{c,i}$ = Density of coating, i, kgs per liter coating, determined according to §63.4551(c).

 $M_{s,i}$ = Mass fraction of coating solids for coating, i, kgs solids per kg coating, determined according to \$63.4541(b).

m = Number of coatings used during the month.

(g) Calculate the organic HAP emission rate. Calculate the organic HAP emission rate for the compliance period, kg (lb) organic HAP emitted per kg (lb) coating solids used, using Equation 3 of this section:

$$H_{yy} = \frac{\sum_{y=1}^{n} H_{e}}{\sum_{y=1}^{n} M_{st}}$$
 (Eq. 3)

Where:

H_{vr} = Average organic HAP emission rate for the compliance period, kg organic HAP emitted per kg coating solids used.

 H_e = Total mass of organic HAP emissions from all materials used during month, y, kg, as calculated by Equation 1 of this section.

M_{st} = Total mass of coating solids used during month, y, kg, as calculated by Equation 2 of this section.

y = Identifier for months.

- n = Number of full or partial months in the compliance period (for the initial compliance period, n equals 12 if the compliance date falls on the first day of a month; otherwise n equals 13; for all following compliance periods, n equals 12).
- (h) Compliance demonstration. The organic HAP emission rate for the initial compliance period calculated using Equation 3 of this section must be less than or equal to the applicable emission limit for each subcategory in §63.4490 or the predominant activity or facility-specific emission limit allowed in §63.4490(c). The Permittee must keep all records as required by §63.4530 and 63.4531. As part of the notification of compliance status required by §63.4510, the Permittee must identify the coating operation(s) for which the Permittee used the emission rate without add-on controls option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because the organic HAP emission rate was less than or equal to the applicable emission limit in §63.4490, determined according to the procedures in this section.

Pursuant to §63.4552

(a) To demonstrate continuous compliance, the organic HAP emission rate for each compliance period, determined according to \$63.4551(a) through (g), must be less than or equal to the applicable emission limit in \$63.4490. A compliance period consists of 12 months. Each month after the end of the initial compliance period described in \$63.4550 is the end of a compliance period consisting of that month and the preceding 11 months. The Permittee must perform the calculations in \$63.4551(a) through (g) on a monthly basis using data from the previous 12 months of operation. If the Permittee is complying with a facility-specific emission limit under \$63.4490(c), the Permittee must also perform the calculation using Equation 1 in \$63.4490(c)(2) on a monthly basis using the data from the previous 12 months of operation.

(b) If the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit in \$63.4490, this is a deviation from the emission limitation for that compliance period and must be reported as specified in \$\$63.4510(c)(6) and 63.4520(a)(6).

- (c) As part of each semiannual compliance report required by §63.4520, the Permittee must identify the coating operation(s) for which the Permittee used the emission rate without add-on controls option. If there were no deviations from the emission limitations, the Permittee must submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit in §63.4490, determined according to §63.4551(a) through (g).
- (d) The Permittee must maintain records as specified in §§63.4530 and 63.4531.

Pursuant to §63.4560

- (a) New and reconstructed affected sources. For a new or reconstructed affected source, the Permittee must meet the requirements of paragraphs (a)(1) through (4) of this section.
- (1) All emission capture systems, add-on control devices, and CPMS must be installed and operating no later than the applicable compliance date specified in §63.4483. Except for solvent recovery systems for which the Permittee conducts liquid-liquid material balances according to §63.4561(j), the Permittee must conduct a performance test of each capture system and add-on control device according to §63.4564, 63.4565, and 63.4566 and establish the operating limits required by §63.4492 no later than 180 days after the applicable compliance date specified in §63.4483. For a solvent recovery system for which the Permittee conducts liquid-liquid material balances according to §63.4561(j), the Permittee must initiate the first material balance no later than the applicable compliance date specified in §63.4483.
- (2) The Permittee must develop and begin implementing the work practice plan required by §63.4493 no later than the compliance date specified in §63.4483.
- (3) The Permittee must complete the initial compliance demonstration for the initial compliance period according to the requirements of §63.4561. The initial compliance period begins on the applicable compliance date specified in §63.4483 and ends on the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through the end of that month plus the next 12 months. The Permittee must determine the mass of organic HAP emissions and mass of coatings solids used each month and then calculate an organic HAP emission rate at the end of the initial compliance period. The initial compliance demonstration includes the results of emission capture system and add-on control device performance tests conducted according to §63.4564, 63.4565, and 63.4566; results of liquid-liquid material balances conducted according to §63.4561 (j); calculations according to §63.4561 and supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the applicable emission limit in §63.4490; the operating limits established during the performance tests and the results of the continuous parameter monitoring required by §63.4568; and documentation of whether the Permittee developed and implemented the work practice plan required by §63.4493.
- (4) The Permittee does not need to comply with the operating limits for the emission capture system and add-on control device required by §63.4492 until after the Permittee has completed the performance tests specified in paragraph (a)(1) of this section. Instead, the Permittee must maintain a log detailing the operation and maintenance of the emission capture system, add-on control device, and continuous parameter monitors during the period between the compliance date and the performance test. The Permittee must begin complying with the operating limits for the Permittee's affected source on the date the Permittee completes the performance tests specified in paragraph (a)(1) of this section. The requirements in this paragraph (a)(4) do not apply to solvent recovery systems for which the Permittee conducts liquid-liquid material balances according to the requirements in §63.4561(j).
- (b) Existing affected sources. For an existing affected source, the Permittee must meet the requirements of paragraphs (b)(1) through (3) of this section.

(1) All emission capture systems, add-on control devices, and CPMS must be installed and operating no later than the applicable compliance date specified in §63.4483. Except for solvent recovery systems for which the Permittee conducts liquid-liquid material balances according to §63.4561(j), the Permittee must conduct a performance test of each capture system and add-on control device according to the procedures in §\$63.4564, 63.4565, and 63.4566 and establish the operating limits required by §63.4492 no later than the compliance date specified in §63.4483. For a solvent recovery system for which the Permittee conducts liquid-liquid material balances according to §63.4561(j), the Permittee must initiate the first material balance no later than the compliance date specified in §63.4483.

- (2) The Permittee must develop and begin implementing the work practice plan required by §63.4493 no later than the compliance date specified in §63.4483.
- (3) The Permittee must complete the initial compliance demonstration for the initial compliance period according to the requirements of §63.4561. The initial compliance period begins on the applicable compliance date specified in §63.4483 and ends on the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through the end of that month plus the next 12 months. The Permittee must determine the mass of organic HAP emissions and mass of coatings solids used each month and then calculate an organic HAP emission rate at the end of the initial compliance period. The initial compliance demonstration includes the results of emission capture system and add-on control device performance tests conducted according to §63.4565, and 63.4566; results of liquid-liquid material balances conducted according to §63.4561(j); calculations according to §63.4561 and supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the applicable emission limit in §63.4490; the operating limits established during the performance tests and the results of the continuous parameter monitoring required by §63.4568; and documentation of whether the Permittee developed and implemented the work practice plan required by §63.4493.
- (c) The Permittee is not required to conduct an initial performance test to determine capture efficiency or destruction efficiency of a capture system or control device if the Permittee receives approval to use the results of a performance test that has been previously conducted on that capture system or control device. Any such previous tests must meet the conditions described in paragraphs (c)(1) through (3) of this section.
- (1) The previous test must have been conducted using the methods and conditions specified in this subpart.
- (2) Either no process or equipment changes must have been made since the previous test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.
- (3) Either the required operating parameters were established in the previous test or sufficient data were collected in the previous test to establish the required operating parameters.

Pursuant to §63.4561

(a) The Permittee may use the emission rate with add-on controls option for any coating operation, for any group of coating operations in the affected source, or for all of the coating operations in the affected source. The Permittee may include both controlled and uncontrolled coating operations in a group for which the Permittee uses this option. The Permittee must use either the compliant material option or the emission rate without add-on controls option for any coating operation in the affected source for which the Permittee does not use the emission rate with add-on controls option. To demonstrate initial compliance, the coating operation(s) for which the Permittee uses the emission rate with add-on controls option must meet the applicable emission limitations in §§63.4490, 63.4492, and 63.4493. The Permittee must conduct a separate initial compliance demonstration for each general use, TPO, automotive lamp, and assembled on-road vehicle coating operation, unless the Permittee is demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.4490(c). If the Permittee is demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.4490(c), the Permittee must demonstrate that all coating operations included in the predominant activity determination or calculation of the facility-specific emission limit comply with that limit. The Permittee must meet all the requirements of this section. When calculating the organic HAP emission rate according to this section, do not include any coatings, thinners and/or other additives, or cleaning materials used on coating operations for which the Permittee uses the compliant material option or the emission rate without add-on controls option. The Permittee does not need to redetermine the mass of organic HAP in coatings, thinners and/or other additives, or cleaning materials that have been reclaimed onsite (or reclaimed off-site if the Permittee has documentation showing that the Permittee has received back the exact same materials that were sent off-site) and reused in the coatings operation(s) for which the Permittee uses the emission rate with add-on controls option. If the Permittee uses coatings, thinners and/or other additives, or cleaning materials that have been

reclaimed on-site, the amount of each used in a month may be reduced by the amount of each that is reclaimed. That is, the amount used may be calculated as the amount consumed to account for materials that are reclaimed.

- (b) Compliance with operating limits. Except as provided in §63.4560(a)(4), and except for solvent recovery systems for which the permittee conducts liquid-liquid material balances according to the requirements of paragraph (j) of this section, the Permittee must establish and demonstrate continuous compliance during the initial compliance period with the operating limits required by §63.4492, using the procedures specified in §§63.4567 and 63.4568.
- (c) Compliance with work practice requirements. The Permittee must develop, implement, and document the Permittee's implementation of the work practice plan required by §63.4493 during the initial compliance period, as specified in §63.4530.
- (d) *Compliance with emission limits*. The Permittee must follow the procedures in paragraphs (e) through (n) of this section to demonstrate compliance with the applicable emission limit in §63.4490 for each affected source in each subcategory.
- (e) Determine the mass fraction of organic HAP, density, volume used, and mass fraction of coating solids. Follow the procedures specified in §63.4551(a) through (d) to determine the mass fraction of organic HAP, density, and volume of each coating, thinner and/or other additive, and cleaning material used during each month; and the mass fraction of coating solids for each coating used during each month.
- (f) Calculate the total mass of organic HAP emissions before add-on controls. Using Equation 1 of §63.4551, calculate the total mass of organic HAP emissions before add-on controls from all coatings, thinners and/or other additives, and cleaning materials used during each month in the coating operation or group of coating operations for which the Permittee uses the emission rate with add-on controls option.
- (g) Calculate the organic HAP emission reduction for each controlled coating operation. Determine the mass of organic HAP emissions reduced for each controlled coating operation during each month. The emission reduction determination quantifies the total organic HAP emissions that pass through the emission capture system and are destroyed or removed by the add-on control device. Use the procedures in paragraph (h) of this section to calculate the mass of organic HAP emission reduction for each controlled coating operation using an emission capture system and add-on control device other than a solvent recovery system for which the Permittee conducts liquid-liquid material balances. For each controlled coating operation using a solvent recovery system for which the Permittee conducts a liquid-liquid material balance, use the procedures in paragraph (j) of this section to calculate the organic HAP emission reduction.
- (h) Calculate the organic HAP emission reduction for each controlled coating operation not using liquid-liquid material balance. Use Equation 1 of this section to calculate the organic HAP emission reduction for each controlled coating operation using an emission capture system and add-on control device other than a solvent recovery system for which the Pemittee conducts liquid-liquid material balances. The calculation applies the emission capture system efficiency and add-on control device efficiency to the mass of organic HAP contained in the coatings, thinners and/or other additives, and cleaning materials that are used in the coating operation served by the emission capture system and add-on control device during each month. The permittee must assume zero efficiency for the emission capture system and add-on control device for any period of time a deviation specified in §63.4563(c) or (d) occurs in the controlled coating operation, including a deviation during a period of startup, shutdown, or malfunction, unless the Permittee has other data indicating the actual efficiency of the emission capture system and add-on control device and the use of these data is approved by the Administrator. Equation 1 of this section treats the materials used during such a deviation as if they were used on an uncontrolled coating operation for the time period of the deviation.

$$H_C = (A_C + B_C + C_C - R_W - H_{UNC}) \left(\frac{CE}{100} \times \frac{DRE}{100} \right)$$
 (Eq. 1)

Where:

H_C = Mass of organic HAP emission reduction for the controlled coating operation during the month, kg.

 A_C = Total mass of organic HAP in the coatings used in the controlled coating operation during the month, kg, as calculated in Equation 1A of this section.

B_C = Total mass of organic HAP in the thinners and/or other additives used in the controlled coating operation during the month, kg, as calculated in Equation 1B of this section.

 C_C = Total mass of organic HAP in the cleaning materials used in the controlled coating operation during the month, kg, as calculated in Equation 1C of this section.

 R_w = Total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during the compliance period, kg, determined according to $\S63.4951(e)(4)$. (The Permittee may assign a value of zero to R_w if the Permittee does not wish to use this allowance.)

 H_{UNC} = Total mass of organic HAP in the coatings, thinners and/or other additives, and cleaning materials used during all deviations specified in $\S63.4563(c)$ and (d) that occurred during the month in the controlled coating operation, kg, as calculated in Equation 1D of this section.

CE = Capture efficiency of the emission capture system vented to the add-on control device, percent. Use the test methods and procedures specified in §§63.4564 and 63.4565 to measure and record capture efficiency.

DRE = Organic HAP destruction or removal efficiency of the add-on control device, percent. Use the test methods and procedures in §§63.4564 and 63.4566 to measure and record the organic HAP destruction or removal efficiency.

(1) Calculate the mass of organic HAP in the coatings used in the controlled coating operation, kg (lb), using Equation 1A of this section:

$$A_{C} = \sum_{i=1}^{m} (Vol_{ei}) (D_{ci}) (W_{ci}) \quad (Eq. 1A)$$

Where:

A_C = Total mass of organic HAP in the coatings used in the controlled coating operation during the month, kg.

Vol_{c,i} = Total volume of coating, i, used during the month, liters.

 $D_{c,i}$ = Density of coating, i, kg per liter.

 $W_{c,i}$ = Mass fraction of organic HAP in coating, i, kg per kg. For reactive adhesives as defined in §63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.

m = Number of different coatings used.

(2) Calculate the mass of organic HAP in the thinners and/or other additives used in the controlled coating operation, kg (lb), using Equation 1B of this section:

$$B_C = \sum_{j=1}^{n} (Vol_{t,j}) (D_{t,j}) (W_{t,j}) \qquad (Eq. 1B)$$

Where:

 B_C = Total mass of organic HAP in the thinners and/or other additives used in the controlled coating operation during the month, kg.

Vol_{t,i}= Total volume of thinner and/or other additive, j, used during the month, liters.

 $D_{t,j}$ = Density of thinner and/or other additive, j, kg per liter.

 $W_{t,j}$ = Mass fraction of organic HAP in thinner and/or other additive, j, kg per kg. For reactive adhesives as defined in §63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.

n = Number of different thinners and/or other additives used.

(3) Calculate the mass of organic HAP in the cleaning materials used in the controlled coating operation during the month, kg (lb), using Equation 1C of this section:

$$C_C = \sum_{k=1}^{p} (Vol_{s,k}) (D_{sk}) (W_{s,k}) \quad (Eq. 1C)$$

Where:

C_C = Total mass of organic HAP in the cleaning materials used in the controlled coating operation during the month, kg.

 $Vol_{s,k}$ = Total volume of cleaning material, k, used during the month, liters.

 $D_{s,k}$ = Density of cleaning material, k, kg per liter.

W_{s,k} = Mass fraction of organic HAP in cleaning material, k, kg per kg.

p = Number of different cleaning materials used.

(4) Calculate the mass of organic HAP in the coatings, thinners and/or other additives, and cleaning materials used in the controlled coating operation during deviations specified in §63.4563(c) and (d), using Equation 1D of this section:

$$H_{UVC} = \sum_{h=1}^{q} (V \circ l_h)(D_h)(W_h) \quad (Eq. 1D)$$

Where:

 H_{UNC} = Total mass of organic HAP in the coatings, thinners and/or other additives, and cleaning materials used during all deviations specified in §63.4563(c) and (d) that occurred during the month in the controlled coating operation, kg.

 $Vol_h = Total$ volume of coating, thinner and/or other additive, or cleaning material, h, used in the controlled coating operation during deviations, liters.

D_h = Density of coating, thinner and/or other additives, or cleaning material, h, kg per liter.

 W_h = Mass fraction of organic HAP in coating, thinner and/or other additives, or cleaning material, h, kg organic HAP per kg coating. For reactive adhesives as defined in §63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.

q = Number of different coatings, thinners and/or other additives, and cleaning materials used.

- (i) [Reserved]
- (j) Calculate the organic HAP emission reduction for each controlled coating operation using liquid-liquid material balances. For each controlled coating operation using a solvent recovery system for which the Permittee conducts liquid-liquid material balances, calculate the organic HAP emission reduction by applying the volatile organic matter collection and recovery efficiency to the mass of organic HAP contained in the coatings, thinners and/or other additives, and cleaning materials that are used in the coating operation controlled by the solvent recovery system during each month. Perform a liquid-liquid material balance for each month as specified in paragraphs (j)(1) through (6) of this section. Calculate the mass of organic HAP emission reduction by the solvent recovery system as specified in paragraph (j)(7) of this section.

(1) For each solvent recovery system, install, calibrate, maintain, and operate according to the manufacturer's specifications, a device that indicates the cumulative amount of volatile organic matter recovered by the solvent recovery system each month. The device must be initially certified by the manufacturer to be accurate to within ± 2.0 percent of the mass of volatile organic matter recovered.

- (2) For each solvent recovery system, determine the mass of volatile organic matter recovered for the month, based on measurement with the device required in paragraph (j)(1) of this section.
- (3) Determine the mass fraction of volatile organic matter for each coating, thinner and/or other additive, and cleaning material used in the coating operation controlled by the solvent recovery system during the month, kg volatile organic matter per kg coating. The Permittee may determine the volatile organic matter mass fraction using Method 24 of 40 CFR part 60, appendix A, or an EPA approved alternative method, or the Permittee may use information provided by the manufacturer or supplier of the coating. In the event of any inconsistency between information provided by the manufacturer or supplier and the results of Method 24 of 40 CFR part 60, appendix A, or an approved alternative method, the test method results will take precedence unless, after consultation the Permittee may demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.
- (4) Determine the density of each coating, thinner and/or other additive, and cleaning material used in the coating operation controlled by the solvent recovery system during the month, kg per liter, according to §63.4551(c).
- (5) Measure the volume of each coating, thinner and/or other additive, and cleaning material used in the coating operation controlled by the solvent recovery system during the month, liters.
- (6) Each month, calculate the solvent recovery system's volatile organic matter collection and recovery efficiency, using Equation 2 of this section:

$$R_{V} = 100 \frac{M_{VR}}{\sum_{i=1}^{m} Vol_{i} D_{i} W V_{c,i} + \sum_{j=1}^{n} Vol_{j} D_{j} W V_{t,j} + \sum_{k=1}^{p} Vol_{k} D_{k} W V_{s,k}}$$
 (Eq. 2)

Where:

R_V = Volatile organic matter collection and recovery efficiency of the solvent recovery system during the month, percent.

 $M_{VR} = Mass$ of volatile organic matter recovered by the solvent recovery system during the month, kg.

Vol_i = Volume of coating, i, used in the coating operation controlled by the solvent recovery system during the month, liters.

 D_i = Density of coating, i, kg per liter.

 $WV_{c,i}$ = Mass fraction of volatile organic matter for coating, i, kg volatile organic matter per kg coating. For reactive adhesives as defined in §63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.

 $Vol_j = Volume$ of thinner and/or other additive, j, used in the coating operation controlled by the solvent recovery system during the month, liters.

D_i= Density of thinner and/or other additive, j, kg per liter.

 $WV_{t,j}$ = Mass fraction of volatile organic matter for thinner and/or other additive, j, kg volatile organic matter per kg thinner and/or other additive. For reactive adhesives as defined in §63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.

 $Vol_k = Volume$ of cleaning material, k, used in the coating operation controlled by the solvent recovery system during the month, liters.

 D_k = Density of cleaning material, k, kg per liter.

WV_{s,k} = Mass fraction of volatile organic matter for cleaning material, k, kg volatile organic matter per kg cleaning material.

m = Number of different coatings used in the coating operation controlled by the solvent recovery system during the month.

n = Number of different thinners and/or other additives used in the coating operation controlled by the solvent recovery system during the month.

p = Number of different cleaning materials used in the coating operation controlled by the solvent recovery system during the month.

(7) Calculate the mass of organic HAP emission reduction for the coating operation controlled by the solvent recovery system during the month, using Equation 3 of this section and according to paragraphs (j)(7)(i) through (iii) of this section:

$$H_{\text{CSR}} = \left(A_{\text{CSR}} + B_{\text{CSR}} + C_{\text{CSR}}\right) \left(\frac{R_{\text{w}}}{100}\right) \qquad (Eq. 3)$$

Where:

 H_{CSR} = Mass of organic HAP emission reduction for the coating operation controlled by the solvent recovery system using a liquid-liquid material balance during the month, kg.

 A_{CSR} = Total mass of organic HAP in the coatings used in the coating operation controlled by the solvent recovery system, kg, calculated using Equation 3A of this section.

 B_{CSR} = Total mass of organic HAP in the thinners and/or other additives used in the coating operation controlled by the solvent recovery system, kg, calculated using Equation 3B of this section.

 C_{CSR} = Total mass of organic HAP in the cleaning materials used in the coating operation controlled by the solvent recovery system, kg, calculated using Equation 3C of this section.

 R_V = Volatile organic matter collection and recovery efficiency of the solvent recovery system, percent, from Equation 2 of this section.

(i) Calculate the mass of organic HAP in the coatings used in the coating operation controlled by the solvent recovery system, kg, using Equation 3A of this section.

$$A_{CSR} = \sum_{i=1}^{m} (Vol_{e,i}) (D_{c,i}) (W_{c,i}) \quad (Eq. 3A)$$

Where:

 A_{CSR} = Total mass of organic HAP in the coatings used in the coating operation controlled by the solvent recovery system during the month, kg.

 $Vol_{c,i}$ = Total volume of coating, i, used during the month in the coating operation controlled by the solvent recovery system, liters.

 $D_{c,i}$ = Density of coating, i, kg per liter.

 $W_{c,i}$ = Mass fraction of organic HAP in coating, i, kg organic HAP per kg coating. For reactive adhesives as defined in §63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.

m = Number of different coatings used.

(ii) Calculate the mass of organic HAP in the thinners and/or other additives used in the coating operation controlled by the solvent recovery system, kg, using Equation 3B of this section:

$$B_{\text{CSR}} = \sum_{j=1}^{n} (\text{Vol}_{t,j}) (\text{D}_{t,j}) (\text{W}_{t,j}) \quad (Eq. 3B)$$

Where:

 B_{CSR} = Total mass of organic HAP in the thinners and/or other additives used in the coating operation controlled by the solvent recovery system during the month, kg.

 $Vol_{t,j}$ = Total volume of thinner and/or other additive, j, used during the month in the coating operation controlled by the solvent recovery system, liters.

 $D_{t,i}$ = Density of thinner and/or other additive, j, kg per liter.

 $W_{t,j}$ = Mass fraction of organic HAP in thinner and/or other additive, j, kg organic HAP per kg thinner and/or other additive. For reactive adhesives as defined in §63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.

n = Number of different thinners and/or other additives used.

(iii) Calculate the mass of organic HAP in the cleaning materials used in the coating operation controlled by the solvent recovery system during the month, kg, using Equation 3C of this section:

$$C_{\text{CSR}} = \sum_{k=1}^{p} (Vol_{s,k}) (D_{s,k}) (W_{s,k}) \quad (Eq. 3C)$$

Where:

 C_{CSR} = Total mass of organic HAP in the cleaning materials used in the coating operation controlled by the solvent recovery system during the month, kg.

 $Vol_{s,k}$ = Total volume of cleaning material, k, used during the month in the coating operation controlled by the solvent recovery system, liters.

 $D_{s,k}$ = Density of cleaning material, k, kg per liter.

W_{s,k} = Mass fraction of organic HAP in cleaning material, k, kg organic HAP per kg cleaning material.

p = Number of different cleaning materials used.

- (k) Calculate the total mass of coating solids used. Determine the total mass of coating solids used, kg, which is the combined mass of coating solids for all the coatings used during each month in the coating operation or group of coating operations for which the Permittee uses the emission rate with add-on controls option, using Equation 2 of §63.4551.
- (1) Calculate the mass of organic HAP emissions for each month. Determine the mass of organic HAP emissions, kg, during each month, using Equation 4 of this section:

$$H_{HAP} = H_e - \sum_{i=1}^{q} (H_{C,i}) - \sum_{j=1}^{r} (H_{CSR,j})$$
 (Eq. 4)

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Where:

H_{HAP} = Total mass of organic HAP emissions for the month, kg.

 H_e = Total mass of organic HAP emissions before add-on controls from all the coatings, thinners and/or other additives, and cleaning materials used during the month, kg, determined according to paragraph (f) of this section.

 $H_{C,I}$ = Total mass of organic HAP emission reduction for controlled coating operation, i, not using a liquid-liquid material balance, during the month, kg, from Equation 1 of this section.

H_{CSR,j} = Total mass of organic HAP emission reduction for coating operation, j, controlled by a solvent recovery system using a liquid-liquid material balance, during the month, kg, from Equation 3 of this section.

q = Number of controlled coating operations not controlled by a solvent recovery system using a liquid-liquid material balance.

r = Number of coating operations controlled by a solvent recovery system using a liquid-liquid material balance.

(m) Calculate the organic HAP emission rate for the compliance period. Determine the organic HAP emission rate for the compliance period, kg (lb) of organic HAP emitted per kg (lb) coating solids used, using Equation 5 of this section:

$$H_{annual} = \frac{\sum_{y=1}^{n} H_{EMP,y}}{\sum_{y=1}^{n} M_{st,y}}$$
 (Eq. 5)

Where:

H_{annual} = Organic HAP emission rate for the compliance period, kg organic HAP emitted per kg coating solids used.

H_{HAP,y} = Organic HAP emissions for month, y, kg, determined according to Equation 4 of this section.

 $M_{\text{st,y}}$ = Total mass of coating solids used during month, y, kg, from Equation 2 of §63.4551.

y = Identifier for months.

n = Number of full or partial months in the compliance period (for the initial compliance period, n equals 12 if the compliance date falls on the first day of a month; otherwise n equals 13; for all following compliance periods, n equals 12).

(n) Compliance demonstration. The organic HAP emission rate for the initial compliance period, calculated using Equation 5 of this section, must be less than or equal to the applicable emission limit for each subcategory in §63.4490 or the predominant activity or facility-specific emission limit allowed in §63.4490(c). The Permittee must keep all records as required by §63.4530 and 63.4531. As part of the notification of compliance status required by §63.4510, the Permittee must identify the coating operation(s) for which the Permittee used the emission rate with add-on controls option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because the organic HAP emission rate was less than or equal to the applicable emission limit in §63.4490, and the Permittee achieved the operating limits required by §63.4492 and the work practice standards required by §63.4493.

Pursuant to §63.4562 [RESERVED]

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Pursuant to §63.4563

(a) To demonstrate continuous compliance with the applicable emission limit in §63.4490, the organic HAP emission rate for each compliance period, determined according to the procedures in §63.4561, must be equal to or less than the applicable emission limit in §63.4490. A compliance period consists of 12 months. Each month after the end of the initial compliance period described in §63.4560 is the end of a compliance period consisting of that month and the preceding 11 months. The Permittee must perform the calculations in §63.4561 on a monthly basis using data from the previous 12 months of operation. If the Permittee is complying with a facility-specific emission limit under §63.4490(c), the Permittee must also perform the calculation using Equation 1 in §63.4490(c)(2) on a monthly basis using the data from the previous 12 months of operation.

- (b) If the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit in §63.4490, this is a deviation from the emission limitation for that compliance period that must be reported as specified in §§63.4510(c)(6) and 63.4520(a)(7).
- (c) The Permittee must demonstrate continuous compliance with each operating limit required by §63.4492 that applies to the Permittee, as specified in Table 1 to this subpart, when the coating line is in operation.
- (1) If an operating parameter is out of the allowed range specified in Table 1 to this subpart, this is a deviation from the operating limit that must be reported as specified in §§63.4510(c)(6) and 63.4520(a)(7).
- (2) If an operating parameter deviates from the operating limit specified in Table 1 to this subpart, then the Permittee must assume that the emission capture system and add-on control device were achieving zero efficiency during the time period of the deviation, unless the Permittee has other data indicating the actual efficiency of the emission capture system and add-on control device and the use of these data is approved by the Administrator.
- (d) The Permittee must meet the requirements for bypass lines in §63.4568(b) for controlled coating operations for which the Permittee does not conduct liquid-liquid material balances. If any bypass line is opened and emissions are diverted to the atmosphere when the coating operation is running, this is a deviation that must be reported as specified in §§63.4510(c)(6) and 63.4520(a)(7). For the purposes of completing the compliance calculations specified in §§63.4561(h), the Permittee must treat the materials used during a deviation on a controlled coating operation as if they were used on an uncontrolled coating operation for the time period of the deviation as indicated in Equation 1 of §63.4561.
- (e) The Permittee must demonstrate continuous compliance with the work practice standards in §63.4493. If the Permittee did not develop a work practice plan, or the Permittee did not implement the plan, or the Permittee did not keep the records required by §63.4530(i)(8), this is a deviation from the work practice standards that must be reported as specified in §§63.4510(c)(6) and 63.4520(a)(7).
- (f) As part of each semiannual compliance report required in §63.4520, the Permittee must identify the coating operation(s) for which the Permittee used the emission rate with add-on controls option. If there were no deviations from the emission limitations, submit a statement that the Permittee was in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit in §63.4490, and the Permittee achieved the operating limits required by §63.4492 and the work practice standards required by §63.4493 during each compliance period.
- (g)–(i) [Reserved]
- (i) The Permittee must maintain records as specified in §§63.4530 and 63.4531.
- [69 FR 20990, Apr. 19, 2004, as amended at 71 FR 20465, Apr. 20, 2006]

Pursuant to §63.4564

(a) The Permittee must conduct each performance test required by §63.4560 according to the requirements in §63.7(e)(1) and under the conditions in this section, unless the Permittee obtains a waiver of the performance test according to the provisions in §63.7(h).

(1) Representative coating operation operating conditions. The Permittee must conduct the performance test under representative operating conditions for the coating operation. Operations during periods of startup, shutdown, or malfunction and during periods of nonoperation do not constitute representative conditions. The Permittee must record the process information that is necessary to document operating conditions during the test and explain why the conditions represent normal operation.

- (2) Representative emission capture system and add-on control device operating conditions. The Permittee must conduct the performance test when the emission capture system and add-on control device are operating at a representative flow rate, and the add-on control device is operating at a representative inlet concentration. The Permittee must record information that is necessary to document emission capture system and add-on control device operating conditions during the test and explain why the conditions represent normal operation.
- (b) The Permittee must conduct each performance test of an emission capture system according to the requirements in §63.4565. The Permittee must conduct each performance test of an add-on control device according to the requirements in §63.4566.

Pursuant to §63.4565

The Permittee must use the procedures and test methods in this section to determine capture efficiency as part of the performance test required by §63.4560.

- (a) Assuming 100 percent capture efficiency. The Permittee may assume the capture system efficiency is 100 percent if both of the conditions in paragraphs (a)(1) and (2) of this section are met:
- (1) The capture system meets the criteria in Method 204 of appendix M to 40 CFR part 51 for a PTE and directs all the exhaust gases from the enclosure to an add-on control device.
- (2) All coatings, thinners and/or other additives, and cleaning materials used in the coating operation are applied within the capture system; coating solvent flash-off, curing, and drying occurs within the capture system; and the removal or evaporation of cleaning materials from the surfaces they are applied to occurs within the capture system. For example, this criterion is not met if parts enter the open shop environment when being moved between a spray booth and a curing oven.
- (b) Measuring capture efficiency. If the capture system does not meet both of the criteria in paragraphs (a)(1) and (2) of this section, then the Permittee must use one of the three protocols described in paragraphs (c), (d), and (e) of this section to measure capture efficiency. The capture efficiency measurements use TVH capture efficiency as a surrogate for organic HAP capture efficiency. For the protocols in paragraphs (c) and (d) of this section, the capture efficiency measurement must consist of three test runs. Each test run must be at least 3 hours duration or the length of a production run, whichever is longer, up to 8 hours. For the purposes of this test, a production run means the time required for a single part to go from the beginning to the end of the production, which includes surface preparation activities and drying and curing time.
- (c) Liquid-to-uncaptured-gas protocol using a temporary total enclosure or building enclosure. The liquid-to-uncaptured-gas protocol compares the mass of liquid TVH in materials used in the coating operation to the mass of TVH emissions not captured by the emission capture system. Use a temporary total enclosure or a building enclosure and the procedures in paragraphs (c)(1) through (6) of this section to measure emission capture system efficiency using the liquid-to-uncaptured-gas protocol.
- (1) Either use a building enclosure or construct an enclosure around the coating operation where coatings, thinners and/or other additives, and cleaning materials are applied, and all areas where emissions from these applied coatings and materials subsequently occur, such as flash-off, curing, and drying areas. The areas of the coating operation where capture devices collect emissions for routing to an add-on control device, such as the entrance and exit areas of an oven or spray booth, must also be inside the enclosure. The enclosure must meet the applicable definition of a temporary total enclosure or building enclosure in Method 204 of appendix M to 40 CFR part 51.
- (2) Use Method 204A or 204F of appendix M to 40 CFR part 51 to determine the mass fraction of TVH liquid input from each coating, thinner and/or other additive, and cleaning material used in the coating operation during each capture efficiency test run. To make the determination, substitute TVH for each occurrence of the term volatile organic compounds (VOC) in the methods.

(3) Use Equation 1 of this section to calculate the total mass of TVH liquid input from all the coatings, thinners and/or other additives, and cleaning materials used in the coating operation during each capture efficiency test run:

$$TVH_{wed} = \sum_{i=1}^{n} (TVH_i)(Vol_i)(D_i)$$
 (Eq. 1)

Where:

TVH_{used} = Mass of liquid TVH in materials used in the coating operation during the capture efficiency test run, kg.

TVH_i = Mass fraction of TVH in coating, thinner and/or other additive, or cleaning material, i, that is used in the coating operation during the capture efficiency test run, kg TVH per kg material.

Vol_i = Total volume of coating, thinner and/or other additive, or cleaning material, i, used in the coating operation during the capture efficiency test run, liters.

 D_i = Density of coating, thinner and/or other additive, or cleaning material, i, kg material per liter material.

n = Number of different coatings, thinners and/or other additives, and cleaning materials used in the coating operation during the capture efficiency test run.

- (4) Use Method 204D or 204E of appendix M to 40 CFR part 51 to measure the total mass, kg, of TVH emissions that are not captured by the emission capture system. They are measured as they exit the temporary total enclosure or building enclosure during each capture efficiency test run. To make the measurement, substitute TVH for each occurrence of the term VOC in the methods.
- (i) Use Method 204D of appendix M to 40 CFR part 51 if the enclosure is a temporary total enclosure.
- (ii) Use Method 204E of appendix M to 40 CFR 51 if the enclosure is a building enclosure. During the capture efficiency measurement, all organic compound emitting operations inside the building enclosure, other than the coating operation for which capture efficiency is being determined, must be shut down, but all fans and blowers must be operating normally.
- (5) For each capture efficiency test run, determine the percent capture efficiency of the emission capture system using Equation 2 of this section:

$$CE = \frac{\left(TVH_{wed} - TVH_{wecaptweed}\right)}{TVH_{wec}} \times 100 \qquad (Eq. 2)$$

Where:

CE = Capture efficiency of the emission capture system vented to the add-on control device, percent.

TVH_{used} = Total mass of TVH liquid input used in the coating operation during the capture efficiency test run, kg.

TVH_{uncaptured} = Total mass of TVH that is not captured by the emission capture system and that exits from the temporary total enclosure or building enclosure during the capture efficiency test run, kg.

(6) Determine the capture efficiency of the emission capture system as the average of the capture efficiencies measured in the three test runs.

- (d) Gas-to-gas protocol using a temporary total enclosure or a building enclosure. The gas-to-gas protocol compares the mass of TVH emissions captured by the emission capture system to the mass of TVH emissions not captured. Use a temporary total enclosure or a building enclosure and the procedures in paragraphs (d)(1) through (5) of this section to measure emission capture system efficiency using the gas-to-gas protocol.
- (1) Either use a building enclosure or construct an enclosure around the coating operation where coatings, thinners and/or other additives, and cleaning materials are applied, and all areas where emissions from these applied coatings and materials subsequently occur, such as flash-off, curing, and drying areas. The areas of the coating operation where capture devices collect emissions generated by the coating operation for routing to an add-on control device, such as the entrance and exit areas of an oven or a spray booth, must also be inside the enclosure. The enclosure must meet the applicable definition of a temporary total enclosure or building enclosure in Method 204 of appendix M to 40 CFR part 51.
- (2) Use Method 204B or 204C of appendix M to 40 CFR part 51 to measure the total mass, kg, of TVH emissions captured by the emission capture system during each capture efficiency test run as measured at the inlet to the add-on control device. To make the measurement, substitute TVH for each occurrence of the term VOC in the methods.
- (i) The sampling points for the Method 204B or 204C measurement must be upstream from the add-on control device and must represent total emissions routed from the capture system and entering the add-on control device.
- (ii) If multiple emission streams from the capture system enter the add-on control device without a single common duct, then the emissions entering the add-on control device must be simultaneously measured in each duct and the total emissions entering the add-on control device must be determined.
- (3) Use Method 204D or 204E of appendix M to 40 CFR part 51 to measure the total mass, kg, of TVH emissions that are not captured by the emission capture system; they are measured as they exit the temporary total enclosure or building enclosure during each capture efficiency test run. To make the measurement, substitute TVH for each occurrence of the term VOC in the methods.
- (i) Use Method 204D of appendix M to 40 CFR part 51 if the enclosure is a temporary total enclosure.
- (ii) Use Method 204E of appendix M to 40 CFR part 51 if the enclosure is a building enclosure. During the capture efficiency measurement, all organic compound emitting operations inside the building enclosure, other than the coating operation for which capture efficiency is being determined, must be shut down, but all fans and blowers must be operating normally.
- (4) For each capture efficiency test run, determine the percent capture efficiency of the emission capture system using Equation 3 of this section:

$$CE = \frac{TVH_{captured}}{\left(TVH_{captured} + TVH_{uncaptured}\right)} \times 100 \qquad (Eq. 3)$$

Where:

CE = Capture efficiency of the emission capture system vented to the add-on control device, percent.

 $TVH_{captured}$ = Total mass of TVH captured by the emission capture system as measured at the inlet to the add-on control device during the emission capture efficiency test run, kg.

TVH_{uncaptured} = Total mass of TVH that is not captured by the emission capture system and that exits from the temporary total enclosure or building enclosure during the capture efficiency test run, kg.

(5) Determine the capture efficiency of the emission capture system as the average of the capture efficiencies measured in the three test runs.

(e) Alternative capture efficiency protocol. As an alternative to the procedures specified in paragraphs (c) and (d) of this section and subject to the approval of the Administrator, the Permittee may determine capture efficiency using any other capture efficiency protocol and test methods that satisfy the criteria of either the DQO or LCL approach as described in appendix A to subpart KK of this part.

Pursuant to §63.4566

The Permittee must use the procedures and test methods in this section to determine the add-on control device emission destruction or removal efficiency as part of the performance test required by §63.4560. The Permittee must conduct three test runs as specified in §63.7(e)(3) and each test run must last at least 1 hour.

- (a) For all types of add-on control devices, use the test methods specified in paragraphs (a)(1) through (5) of this section.
- (1) Use Method 1 or 1A of appendix A to 40 CFR part 60, as appropriate, to select sampling sites and velocity traverse points.
- (2) Use Method 2, 2A, 2C, 2D, 2F, or 2G of appendix A to 40 CFR part 60, as appropriate, to measure gas volumetric flow rate.
- (3) Use Method 3, 3A, or 3B of appendix A to 40 CFR part 60, as appropriate, for gas analysis to determine dry molecular weight.
- (4) Use Method 4 of appendix A to 40 CFR part 60, to determine stack gas moisture.
- (5) Methods for determining gas volumetric flow rate, dry molecular weight, and stack gas moisture must be performed, as applicable, during each test run.
- (b) Measure total gaseous organic mass emissions as carbon at the inlet and outlet of the add-on control device simultaneously, using either Method 25 or 25A of appendix A to 40 CFR part 60.
- (1) Use Method 25 if the add-on control device is an oxidizer and you expect the total gaseous organic concentration as carbon to be more than 50 parts per million (ppm) at the control device outlet.
- (2) Use Method 25A if the add-on control device is an oxidizer and you expect the total gaseous organic concentration as carbon to be 50 ppm or less at the control device outlet.
- (3) Use Method 25A if the add-on control device is not an oxidizer.
- (c) If two or more add-on control devices are used for the same emission stream, then the Permittee must measure emissions at the outlet to the atmosphere of each device. For example, if one add-on control device is a concentrator with an outlet to the atmosphere for the high-volume dilute stream that has been treated by the concentrator, and a second add-on control device is an oxidizer with an outlet to the atmosphere for the low-volume concentrated stream that is treated with the oxidizer, the Permittee must measure emissions at the outlet of the oxidizer and the high volume dilute stream outlet of the concentrator.
- (d) For each test run, determine the total gaseous organic emissions mass flow rates for the inlet and the outlet of the add-on control device, using Equation 1 of this section. If there is more than one inlet or outlet to the add-on control device, the Permittee must calculate the total gaseous organic mass flow rate using Equation 1 of this section for each inlet and each outlet and then total all of the inlet emissions and total all of the outlet emissions:

$$M_f = Q_{sl}C_c(12)(0.0416)(10^{-6})$$
 (Eq. 1)

Where:

 M_f = Total gaseous organic emissions mass flow rate, kg/per hour (h).

 C_c = Concentration of organic compounds as carbon in the vent gas, as determined by Method 25 or Method 25A, parts per million by volume (ppmv), dry basis.

 Q_{sd} = Volumetric flow rate of gases entering or exiting the add-on control device, as determined by Method 2, 2A, 2C, 2D, 2F, or 2G, dry standard cubic meters/hour (dscm/h).

0.0416 = Conversion factor for molar volume, kg-moles per cubic meter (mol/m³) (@ 293 Kelvin (K) and 760 millimeters of mercury (mmHg)).

(e) For each test run, determine the add-on control device organic emissions destruction or removal efficiency, using Equation 2 of this section:

$$DRE = \frac{M_{fi} - M_{fo}}{M_{fi}} \times 100$$
 (Eq. 2)

Where:

DRE = Organic emissions destruction or removal efficiency of the add-on control device, percent.

 $M_{\rm fi}$ = Total gaseous organic emissions mass flow rate at the inlet(s) to the add-on control device, using Equation 1 of this section, kg/h.

 M_{fo} = Total gaseous organic emissions mass flow rate at the outlet(s) of the add-on control device, using Equation 1 of this section, kg/h.

(f) Determine the emission destruction or removal efficiency of the add-on control device as the average of the efficiencies determined in the three test runs and calculated in Equation 2 of this section.

Pursuant to §63.4567

During the performance test required by \$63.4560 and described in \$\$63.4564, 63.4565, and 63.4566, the Permittee must establish the operating limits required by \$63.4492 according to this section, unless the Permittee has received approval for alternative monitoring and operating limits under \$63.8(f) as specified in \$63.4492.

- (a) *Thermal oxidizers*. If the Permittee's add-on control device is a thermal oxidizer, establish the operating limits according to paragraphs (a)(1) and (2) of this section.
- (1) During the performance test, the Permittee must monitor and record the combustion temperature at least once every 15 minutes during each of the three test runs. The Permittee must monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs.
- (2) Use the data collected during the performance test to calculate and record the average combustion temperature maintained during the performance test. This average combustion temperature is the minimum operating limit for the Permittee's thermal oxidizer.
- (b) *Catalytic oxidizers*. If the Permittee's add-on control device is a catalytic oxidizer, establish the operating limits according to either paragraphs (b)(1) and (2) or paragraphs (b)(3) and (4) of this section.
- (1) During the performance test, the Permittee must monitor and record the temperature just before the catalyst bed and the temperature difference across the catalyst bed at least once every 15 minutes during each of the three test runs.
- (2) Use the data collected during the performance test to calculate and record the average temperature just before the catalyst bed and the average temperature difference across the catalyst bed maintained during the performance test. These are the minimum operating limits for the Permittee's catalytic oxidizer.

(3) The Permittee must monitor the temperature at the inlet to the catalyst bed and implement a site-specific inspection and maintenance plan for the Permittee's catalytic oxidizer as specified in paragraph (b)(4) of this section. During the performance test, you must monitor and record the temperature just before the catalyst bed at least once every 15 minutes during each of the three test runs. Use the data collected during the performance test to calculate and record the average temperature just before the catalyst bed during the performance test. This is the minimum operating limit for your catalytic oxidizer.

- (4) The Permittee must develop and implement an inspection and maintenance plan for the Permittee's catalytic oxidizer(s) for which the Permittee elects to monitor according to paragraph (b)(3) of this section. The plan must address, at a minimum, the elements specified in paragraphs (b)(4)(i) through (iii) of this section.
- (i) Annual sampling and analysis of the catalyst activity (*i.e.*, conversion efficiency) following the manufacturer's or catalyst supplier's recommended procedures. If problems are found during the catalyst activity test, the Permittee must replace the catalyst bed or take other corrective action consistent with the manufacturer's recommendations.
- (ii) Monthly external inspection of the catalytic oxidizer system, including the burner assembly and fuel supply lines for problems and, as necessary, adjust the equipment to assure proper air-to-fuel mixtures.
- (iii) Annual internal inspection of the catalyst bed to check for channeling, abrasion, and settling. If problems are found during the annual internal inspection of the catalyst, the Permittee must replace the catalyst bed or take other corrective action consistent with the manufacturer's recommendations. If the catalyst bed is replaced and is not of like or better kind and quality as the old catalyst then the Permittee must conduct a new performance test to determine destruction efficiency according to §63.4566. If a catalyst bed is replaced and the replacement catalyst is of like or better kind and quality as the old catalyst, then a new performance test to determine destruction efficiency is not required and the Permittee may continue to use the previously established operating limits for that catalytic oxidizer.
- (c) Regenerative carbon adsorbers. If the Permittee's add-on control device is a regenerative carbon adsorber, establish the operating limits according to paragraphs (c)(1) and (2) of this section.
- (1) The Permittee must monitor and record the total regeneration desorbing gas (*e.g.*, steam or nitrogen) mass flow for each regeneration cycle, and the carbon bed temperature after each carbon bed regeneration and cooling cycle for the regeneration cycle either immediately preceding or immediately following the performance test.
- (2) The operating limits for the Permittee's regenerative carbon adsorber are the minimum total desorbing gas mass flow recorded during the regeneration cycle and the maximum carbon bed temperature recorded after the cooling cycle.
- (d) *Condensers*. If the Permittee's add-on control device is a condenser, establish the operating limits according to paragraphs (d)(1) and (2) of this section.
- (1) During the performance test, the Permittee must monitor and record the condenser outlet (product side) gas temperature at least once every 15 minutes during each of the three test runs.
- (2) Use the data collected during the performance test to calculate and record the average condenser outlet (product side) gas temperature maintained during the performance test. This average condenser outlet gas temperature is the maximum operating limit for the Permittee's condenser.
- (e) *Concentrators*. If the Permittee's add-on control device includes a concentrator, the Permittee must establish operating limits for the concentrator according to paragraphs (e)(1) through (4) of this section.
- (1) During the performance test, the Permittee must monitor and record the desorption concentrate stream gas temperature at least once every 15 minutes during each of the three runs of the performance test.
- (2) Use the data collected during the performance test to calculate and record the average temperature. This is the minimum operating limit for the desorption concentrate gas stream temperature.
- (3) During the performance test, the Permittee must monitor and record the pressure drop of the dilute stream across the concentrator at least once every 15 minutes during each of the three runs of the performance test.

(4) Use the data collected during the performance test to calculate and record the average pressure drop. This is the minimum operating limit for the dilute stream across the concentrator.

- (f) *Emission capture systems*. For each capture device that is not part of a PTE that meets the criteria of §63.4565(a), establish an operating limit for either the gas volumetric flow rate or duct static pressure, as specified in paragraphs (f)(1) and (2) of this section. The operating limit for a PTE is specified in Table 1 to this subpart.
- (1) During the capture efficiency determination required by §63.4560 and described in §§63.4564 and 63.4565, the Permittee must monitor and record either the gas volumetric flow rate or the duct static pressure for each separate capture device in the Permittee's emission capture system at least once every 15 minutes during each of the three test runs at a point in the duct between the capture device and the add-on control device inlet.
- (2) Calculate and record the average gas volumetric flow rate or duct static pressure for the three test runs for each capture device. This average gas volumetric flow rate or duct static pressure is the minimum operating limit for that specific capture device.

Pursuant to §63.4568

- (a) General. The Permittee must install, operate, and maintain each CPMS specified in paragraphs (c), (e), (f), and (g) of this section according to paragraphs (a)(1) through (6) of this section. The Permittee must install, operate, and maintain each CPMS specified in paragraphs (b) and (d) of this section according to paragraphs (a)(3) through (5) of this section.
- (1) The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. The Permittee must have a minimum of four equally spaced successive cycles of CPMS operation in 1 hour.
- (2) The Permittee must determine the average of all recorded readings for each successive 3-hour period of the emission capture system and add-on control device operation.
- (3) The Permittee must record the results of each inspection, calibration, and validation check of the CPMS.
- (4) The Permittee must maintain the CPMS at all times and have available necessary parts for routine repairs of the monitoring equipment.
- (5) The Permittee must operate the CPMS and collect emission capture system and add-on control device parameter data at all times that a controlled coating operation is operating, except during monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, if applicable, calibration checks and required zero and span adjustments).
- (6) The Permittee must not use emission capture system or add-on control device parameter data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities when calculating data averages. The Permittee must use all the data collected during all other periods in calculating the data averages for determining compliance with the emission capture system and add-on control device operating limits.
- (7) A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the CPMS to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations is a deviation from the monitoring requirements.
- (b) Capture system bypass line. The Permittee must meet the requirements of paragraphs (b)(1) and (2) of this section for each emission capture system that contains bypass lines that could divert emissions away from the add-on control device to the atmosphere.
- (1) The Permittee must monitor or secure the valve or closure mechanism controlling the bypass line in a nondiverting position in such a way that the valve or closure mechanism cannot be opened without creating a record that the valve was opened. The method used to monitor or secure the valve or closure mechanism must meet one of the requirements specified in paragraphs (b)(1)(i) through (v) of this section.

(i) Flow control position indicator. Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow control position indicator that takes a reading at least once every 15 minutes and provides a record indicating whether the emissions are directed to the add-on control device or diverted from the add-on control device. The time of occurrence and flow control position must be recorded, as well as every time the flow direction is changed. The flow control position indicator must be installed at the entrance to any bypass line that could divert the emissions away from the add-on control device to the atmosphere.

- (ii) Car-seal or lock-and-key valve closures. Secure any bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. The Permittee must visually inspect the seal or closure mechanism at least once every month to ensure that the valve is maintained in the closed position, and the emissions are not diverted away from the add-on control device to the atmosphere.
- (iii) *Valve closure monitoring*. Ensure that any bypass line valve is in the closed (nondiverting) position through monitoring of valve position at least once every 15 minutes. The Permittee must inspect the monitoring system at least once every month to verify that the monitor will indicate valve position.
- (iv) Automatic shutdown system. Use an automatic shutdown system in which the coating operation is stopped when flow is diverted by the bypass line away from the add-on control device to the atmosphere when the coating operation is running. The Permittee must inspect the automatic shutdown system at least once every month to verify that it will detect diversions of flow and shut down the coating operation.
- (v) Flow direction indicator. Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow direction indicator that takes a reading at least once every 15 minutes and provides a record indicating whether the emissions are directed to the add-on control device or diverted from the add-on control device. Each time the flow direction changes, the next reading of the time of occurrence and flow direction must be recorded. The flow direction indicator must be installed in each bypass line or air makeup supply line that could divert the emissions away from the add-on control device to the atmosphere.
- (2) If any bypass line is opened, the Permittee must include a description of why the bypass line was opened and the length of time it remained open in the semiannual compliance reports required in §63.4520.
- (c) *Thermal oxidizers and catalytic oxidizers*. If the Permittee is using a thermal oxidizer or catalytic oxidizer as an add-on control device (including those used with concentrators or with carbon adsorbers to treat desorbed concentrate streams), the Permittee must comply with the requirements in paragraphs (c)(1) through (3) of this section:
- (1) For a thermal oxidizer, install a gas temperature monitor in the firebox of the thermal oxidizer or in the duct immediately downstream of the firebox before any substantial heat exchange occurs.
- (2) For a catalytic oxidizer, install gas temperature monitors upstream and/or downstream of the catalyst bed as required in §63.3967(b).
- (3) For all thermal oxidizers and catalytic oxidizers, the Permittee must meet the requirements in paragraphs (a) and (c)(3)(i) through (v) of this section for each gas temperature monitoring device.
- (i) Locate the temperature sensor in a position that provides a representative temperature.
- (ii) Use a temperature sensor with a measurement sensitivity of 5 degrees Fahrenheit or 1.0 percent of the temperature value, whichever is larger.
- (iii) Before using the sensor for the first time or when relocating or replacing the sensor, perform a validation check by comparing the sensor output to a calibrated temperature measurement device or by comparing the sensor output to a simulated temperature.
- (iv) Conduct an accuracy audit every quarter and after every deviation. Accuracy audit methods include comparisons of sensor output to redundant temperature sensors, to calibrated temperature measurement devices, or to temperature simulation devices.

- (v) Conduct a visual inspection of each sensor every quarter if redundant temperature sensors are not used.
- (d) Regenerative carbon adsorbers. If the Permittee is using a regenerative carbon adsorber as an add-on control device, the Permittee must monitor the total regeneration desorbing gas (e.g., steam or nitrogen) mass flow for each regeneration cycle, the carbon bed temperature after each regeneration and cooling cycle, and comply with paragraphs (a)(3) through (5) and (d)(1) through (3) of this section.
- (1) The regeneration desorbing gas mass flow monitor must be an integrating device having a measurement sensitivity of plus or minus 10 percent capable of recording the total regeneration desorbing gas mass flow for each regeneration cycle.
- (2) The carbon bed temperature monitor must be capable of recording the temperature within 15 minutes of completing any carbon bed cooling cycle.
- (3) For all regenerative carbon adsorbers, the Permittee must meet the requirements in paragraphs (c)(3)(i) through (v) of this section for each temperature monitoring device.
- (e) *Condensers*. If the Permittee is using a condenser, the Permittee must monitor the condenser outlet (product side) gas temperature and comply with paragraphs (a) and (e)(1) and (2) of this section.
- (1) The temperature monitor must provide a gas temperature record at least once every 15 minutes.
- (2) For all condensers, the Permittee must meet the requirements in paragraphs (c)(3)(i) through (v) of this section for each temperature monitoring device.
- (f) *Concentrators*. If the Permittee is using a concentrator, such as a zeolite wheel or rotary carbon bed concentrator, the Permittee must comply with the requirements in paragraphs (f)(1) and (2) of this section.
- (1) The Permittee must install a temperature monitor in the desorption gas stream. The temperature monitor must meet the requirements in paragraphs (a) and (c)(3) of this section.
- (2) The Permittee must install a device to monitor pressure drop across the zeolite wheel or rotary carbon bed. The pressure monitoring device must meet the requirements in paragraphs (a) and (g)(2) of this section.
- (g) *Emission capture systems*. The capture system monitoring system must comply with the applicable requirements in paragraphs (g)(1) and (2) of this section.
- (1) For each flow measurement device, the Permittee must meet the requirements in paragraphs (a) and (g)(1)(i) through (vii) of this section.
- (i) Locate a flow sensor in a position that provides a representative flow measurement in the duct from each capture device in the emission capture system to the add-on control device.
- (ii) Use a flow sensor with an accuracy of at least 10 percent of the flow.
- (iii) Perform an initial sensor calibration in accordance with the manufacturer's requirements.
- (iv) Perform a validation check before initial use or upon relocation or replacement of a sensor. Validation checks include comparison of sensor values with electronic signal simulations or via relative accuracy testing.
- (v) Conduct an accuracy audit every quarter and after every deviation. Accuracy audit methods include comparisons of sensor values with electronic signal simulations or via relative accuracy testing.
- (vi) Perform leak checks monthly.
- (vii) Perform visual inspections of the sensor system quarterly if there is no redundant sensor.

(2) For each pressure drop measurement device, the Permittee must comply with the requirements in paragraphs (a) and (g)(2)(i) through (vii) of this section.

- (i) Locate the pressure sensor(s) in or as close to a position that provides a representative measurement of the pressure drop across each opening the Permittee is monitoring.
- (ii) Use a pressure sensor with an accuracy of at least 0.5 inches of water column or 5 percent of the measured value, whichever is larger.
- (iii) Perform an initial calibration of the sensor according to the manufacturer's requirements.
- (iv) Conduct a validation check before initial operation or upon relocation or replacement of a sensor. Validation checks include comparison of sensor values to calibrated pressure measurement devices or to pressure simulation using calibrated pressure sources.
- (v) Conduct accuracy audits every quarter and after every deviation. Accuracy audits include comparison of sensor values to calibrated pressure measurement devices or to pressure simulation using calibrated pressure sources.
- (vi) Perform monthly leak checks on pressure connections. A pressure of at least 1.0 inches of water column to the connection must yield a stable sensor result for at least 15 seconds.
- (vii) Perform a visual inspection of the sensor at least monthly if there is no redundant sensor.

Pursuant to §63.4580

- (a) This subpart can be implemented and enforced by us, the U.S. Environmental Protection Agency (EPA), or a delegated authority such as the Permittee's State, local, or tribal agency. If the Administrator has delegated authority to the Permittee's State, local, or tribal agency, then that agency (as well as the EPA) has the authority to implement and enforce this subpart. The Permittee should contact the EPA Region IV Office to find out if implementation and enforcement of this subpart is delegated to the Permittee's State, local, or tribal agency.
- (b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator and are not transferred to the State, local, or tribal agency.
- (c) The authorities that will not be delegated to State, local, or tribal agencies are listed in paragraphs (c)(1) through (4) of this section:
- (1) Approval of alternatives to the requirements in §§63.4481 through 4483 and §§63.4490 through 4493.
- (2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.
- (3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.
- (4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

Pursuant to §63.4580

Terms used in this subpart are defined in the CAA, in 40 CFR 63.2, and in this section as follows:

Additive means a material that is added to a coating after purchase from a supplier (e.g., catalysts, activators, accelerators).

Add-on control means an air pollution control device, such as a thermal oxidizer or carbon adsorber, that reduces pollution in an air stream by destruction or removal before discharge to the atmosphere.

Adhesive, adhesive coating means any chemical substance that is applied for the purpose of bonding two surfaces together. Products used on humans and animals, adhesive tape, contact paper, or any other product with an adhesive incorporated onto or in an inert substrate shall not be considered adhesives under this subpart.

Assembled on-road vehicle coating means any coating operation in which coating is applied to the surface of some component or surface of a fully assembled motor vehicle or trailer intended for on-road use including, but not limited to, components or surfaces on automobiles and light-duty trucks that have been repaired after a collision or otherwise repainted, fleet delivery trucks, and motor homes and other recreational vehicles (including camping trailers and fifth wheels). Assembled on-road vehicle coating includes the concurrent coating of parts of the assembled on-road vehicle that are painted off-vehicle to protect systems, equipment, or to allow full coverage. Assembled on-road vehicle coating does not include surface coating operations that meet the applicability criteria of the Automobiles and Light-Duty Trucks NESHAP. Assembled on-road vehicle coating also does not include the use of adhesives, sealants, and caulks used in assembling on-road vehicles.

Automotive lamp coating means any coating operation in which coating is applied to the surface of some component of the body of an exterior automotive lamp, including the application of reflective argent coatings and clear topcoats. Exterior automotive lamps include head lamps, tail lamps, turn signals, brake lights, and side marker lights. Automotive lamp coating does not include any coating operation performed on an assembled on-road vehicle.

Capture device means a hood, enclosure, room, floor sweep, or other means of containing or collecting emissions and directing those emissions into an add-on air pollution control device.

Capture efficiency or capture system efficiency means the portion (expressed as a percentage) of the pollutants from an emission source that is delivered to an add-on control device.

Capture system means one or more capture devices intended to collect emissions generated by a coating operation in the use of coatings or cleaning materials, both at the point of application and at subsequent points where emissions from the coatings and cleaning materials occur, such as flashoff, drying, or curing. As used in this subpart, multiple capture devices that collect emissions generated by a coating operation are considered a single capture system.

Cleaning material means a solvent used to remove contaminants and other materials, such as dirt, grease, oil, and dried or wet coating (e.g., depainting), from a substrate before or after coating application or from equipment associated with a coating operation, such as spray booths, spray guns, racks, tanks, and hangers. Thus, it includes any cleaning material used on substrates or equipment or both.

Coating means a material applied to a substrate for decorative, protective, or functional purposes. Such materials include, but are not limited to, paints, sealants, liquid plastic coatings, caulks, inks, adhesives, and maskants. Decorative, protective, or functional materials that consist only of protective oils for metal, acids, bases, or any combination of these substances, or paper film or plastic film which may be pre-coated with an adhesive by the film manufacturer, are not considered coatings for the purposes of this subpart. A liquid plastic coating means a coating made from fine particle-size polyvinyl chloride (PVC) in solution (also referred to as a plastisol).

Coating operation means equipment used to apply cleaning materials to a substrate to prepare it for coating application (surface preparation) or to remove dried coating; to apply coating to a substrate (coating application) and to dry or cure the coating after application; or to clean coating operation equipment (equipment cleaning). A single coating operation may include any combination of these types of equipment, but always includes at least the point at which a given quantity of coating or cleaning material is applied to a given part and all subsequent points in the affected source where organic HAP are emitted from the specific quantity of coating or cleaning material on the specific part. There may be multiple coating operations in an affected source. Coating application with handheld, non-refillable aerosol containers, touch-up markers, or marking pens is not a coating operation for the purposes of this subpart.

Coatings solids means the nonvolatile portion of the coating that makes up the dry film.

Continuous parameter monitoring system (CPMS) means the total equipment that may be required to meet the data acquisition and availability requirements of this subpart, used to sample, condition (if applicable), analyze, and provide a record of coating operation, or capture system, or add-on control device parameters.

Controlled coating operation means a coating operation from which some or all of the organic HAP emissions are routed through an emission capture system and add-on control device.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart including but not limited to, any emission limit or operating limit or work practice standard;

- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or
- (3) Fails to meet any emission limit, or operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Emission limitation means the aggregate of all requirements associated with a compliance option including emission limit, operating limit, work practice standard, etc.

Enclosure means a structure that surrounds a source of emissions and captures and directs the emissions to an add-on control device.

Exempt compound means a specific compound that is not considered a VOC due to negligible photochemical reactivity. The exempt compounds are listed in 40 CFR 51.100(s).

Facility maintenance means the routine repair or renovation (including the surface coating) of the tools, equipment, machinery, and structures that comprise the infrastructure of the affected facility and that are necessary for the facility to function in its intended capacity.

General use coating means any coating operation that is not an automotive lamp, TPO, or assembled on-road vehicle coating operation.

Hobby shop means any surface coating operation, located at an affected source, that is used exclusively for personal, noncommercial purposes by the affected source's employees or assigned personnel.

Manufacturer's formulation data means data on a material (such as a coating) that are supplied by the material manufacturer based on knowledge of the ingredients used to manufacture that material, rather than based on testing of the material with the test methods specified in §63.4541. Manufacturer's formulation data may include, but are not limited to, information on density, organic HAP content, volatile organic matter content, and coating solids content.

Mass fraction of coating solids means the ratio of the mass of solids (also known as the mass of nonvolatiles) to the mass of a coating in which it is contained; kg of coating solids per kg of coating.

Mass fraction of organic HAP means the ratio of the mass of organic HAP to the mass of a material in which it is contained, expressed as kg of organic HAP per kg of material.

Month means a calendar month or a pre-specified period of 28 days to 35 days to allow for flexibility in recordkeeping when data are based on a business accounting period.

Non-HAP coating means, for the purposes of this subpart, a coating that contains no more than 0.1 percent by mass of any individual organic HAP that is an OSHA-defined carcinogen as specified in 29 CFR 1910.1200(d)(4) and no more than 1.0 percent by mass for any other individual HAP.

Organic HAP content means the mass of organic HAP emitted per mass of coating solids used for a coating calculated using Equation 1 of §63.4541. The organic HAP content is determined for the coating in the condition it is in when received from its manufacturer or supplier and does not account for any alteration after receipt. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, organic HAP content is the mass of organic HAP that is emitted, rather than the organic HAP content of the coating as it is received.

Permanent total enclosure (PTE) means a permanently installed enclosure that meets the criteria of Method 204 of appendix M, 40 CFR part 51, for a PTE and that directs all the exhaust gases from the enclosure to an add-on control device.

Personal watercraft means a vessel (boat) which uses an inboard motor powering a water jet pump as its primary source of motive power and which is designed to be operated by a person or persons sitting, standing, or kneeling on the vessel, rather than in the conventional manner of sitting or standing inside the vessel.

Plastic part and product means any piece or combination of pieces of which at least one has been formed from one or more resins. Such pieces may be solid, porous, flexible or rigid.

Protective oil means an organic material that is applied to metal for the purpose of providing lubrication or protection from corrosion without forming a solid film. This definition of protective oil includes, but is not limited to, lubricating oils, evaporative oils (including those that evaporate completely), and extrusion oils.

Reactive adhesive means adhesive systems composed, in part, of volatile monomers that react during the adhesive curing reaction, and, as a result, do not evolve from the film during use. These volatile components instead become integral parts of the adhesive through chemical reaction. At least 70 percent of the liquid components of the system, excluding water, react during the process.

Research or laboratory facility means a facility whose primary purpose is for research and development of new processes and products, that is conducted under the close supervision of technically trained personnel, and is not engaged in the manufacture of final or intermediate products for commercial purposes, except in a *de minimis* manner.

Responsible official means responsible official as defined in 40 CFR 70.2.

Startup, initial means the first time equipment is brought online in a facility.

Surface preparation means use of a cleaning material on a portion of or all of a substrate. This includes use of a cleaning material to remove dried coating, which is sometimes called depainting.

Temporary total enclosure means an enclosure constructed for the purpose of measuring the capture efficiency of pollutants emitted from a given source as defined in Method 204 of appendix M, 40 CFR part 51.

Thermoplastic olefin (TPO) means polyolefins (blends of polypropylene, polyethylene and its copolymers). This also includes blends of TPO with polypropylene and polypropylene alloys including, but not limited to, thermoplastic elastomer (TPE), TPE polyurethane (TPU), TPE polyester (TPEE), TPE polyamide (TPAE), and thermoplastic elastomer polyvinyl chloride (TPVC).

Thermoplastic olefin (TPO) coating means any coating operation in which the coatings are components of a system of coatings applied to a TPO substrate, including adhesion promoters, primers, color coatings, clear coatings and topcoats. Thermoplastic olefin coating does not include the coating of TPO substrates on assembled on-road vehicles.

Thinner means an organic solvent that is added to a coating after the coating is received from the supplier.

Total volatile hydrocarbon (TVH) means the total amount of nonaqueous volatile organic matter determined according to Methods 204 and 204A through 204F of appendix M to 40 CFR part 51 and substituting the term TVH each place in the methods where the term VOC is used. The TVH includes both VOC and non-VOC.

Uncontrolled coating operation means a coating operation from which none of the organic HAP emissions are routed through an emission capture system and add-on control device.

Volatile organic compound (VOC) means any compound defined as VOC in 40 CFR 51.100(s).

Wastewater means water that is generated in a coating operation and is collected, stored, or treated prior to being discarded or discharged.

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Table 1 to Subpart PPPP of Part 63—Operating Limits if Using the Emission Rate With Add-On Controls Option

If the Permittee is required to comply with operating limits by §63.4491(c), the Permittee must comply with the applicable operating limits in the following table:

For the following device	The Permittee must meet the following operating limit	And the Permittee must demonstrate continuous compliar with the operating limit by	
1. Thermal oxidizer	a. The average combustion temperature in any 3-hour period must not fall below the combustion temperature limit established according to §63.4567(a).	i. Collecting the combustion temperature data according to §63.4568(c); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour average combustion temperature at or above the temperature limit.	
2. Catalytic oxidizer		i. Collecting the temperature data according to §63.4568(c); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour average temperature before the catalyst bed at or above the temperature limit.	
	b. Ensure that the average temperature difference across the catalyst bed in any 3-hour period does not fall below the temperature difference limit established according to §63.4567(b)(2); or	 i. Collecting the temperature data according to §63.4568(c); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour average temperature difference at or above the temperature difference limit. 	
	c. Develop and implement an inspection and maintenance plan according to §63.4567(b)(4).	i. Maintaining an up-to-date inspection and maintenance plan, records of annual catalyst activity checks, records of monthly inspections of the oxidizer system, and records of the annual internal inspections of the catalyst bed. If a problem is discovered during a monthly or annual inspection required by §63.4567(b)(4), you must take corrective action as soon as practicable consistent with the manufacturer's recommendations.	
3. Regenerative carbon adsorber	<i>e.g.</i> , steam or nitrogen) mass flow for each carbon bed regeneration cycle must not fall	i. Measuring the total regeneration desorbing gas (<i>e.g.</i> , steam or nitrogen) mass flow for each regeneration cycle according to §63.4568(d); and ii. Maintaining the total regeneration desorbing gas mass flow at or above the mass flow limit.	
	completing each regeneration and any cooling cycle, must not exceed the carbon	i. Measuring the temperature of the carbon bed after completing each regeneration and any cooling cycle according to §63.4568(d); and ii. Operating the carbon beds such that each carbon bed is not returned to service until completing each regeneration and any cooling cycle until the recorded temperature of the carbon bed is at or below the temperature limit.	
4. Condenser	a. The average condenser outlet (product side) gas temperature in any 3-hour period must not exceed the temperature limit established according to §63.4567(d).	i. Collecting the condenser outlet (product side) gas temperature according to \$63.4568(e); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour average gas temperature at the outlet at or below the temperature limit.	
5. Concentrators, including zeolite wheels and rotary carbon adsorbers	a. The average gas temperature of the desorption concentrate stream in any 3-hour period must not fall below the limit established according to §63.4567(e); and	i. Collecting the temperature data according to §63.4568(f); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour average temperature at or above the temperature limit.	

Table 1 to Subpart PPPP of Part 63—Operating Limits if Using the Emission Rate With Add-On Controls Option (continued)

For the following device	The Permittee must meet the following operating limit	And the Permittee must demonstrate continuous compliance with the operating limit by
	b. The average pressure drop of the dilute stream across the concentrator in any 3-hour period must not fall below the limit established according to §63.4567(e).	i. Collecting the pressure drop data according to §63.4568(f); ii. Reducing the pressure drop data to 3-hour block averages; and iii. Maintaining the 3-hour average pressure drop at or above the pressure drop limit.
6. Emission capture system that is a PTE according to §63.4565(a)	a. The direction of the air flow at all times must be into the enclosure; and either	i. Collecting the direction of air flow, and either the facial velocity of air through all natural draft openings according to §63.4568(g)(1) or the pressure drop across the enclosure according to §63.4568(g)(2); and ii. Maintaining the facial velocity of air flow through all natural draft openings or the pressure drop at or above the facial velocity limit or pressure drop limit, and maintaining the direction of air flow into the enclosure at all times.
	b. The average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minute; or	i. See items 6.a.i and 6.a.ii.
	c. The pressure drop across the enclosure must be at least 0.007 inch H ₂ O, as established in Method 204 of appendix M to 40 CFR part 51.	i. See items 6.a.i and 6.a.ii.
7. Emission capture system that is not a PTE according to §63.4565(a)	a. The average gas volumetric flow rate or duct static pressure in each duct between a capture device and add-on control device inlet in any 3-hour period must not fall below the average volumetric flow rate or duct static pressure limit established for that capture device according to §63.4567(f).	i. Collecting the gas volumetric flow rate or duct static pressure for each capture device according to §63.4568(g); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour average gas volumetric flow rate or duct static pressure for each capture device at or above the gas volumetric flow rate or duct static pressure limit.

Table 2 to Subpart PPPP of Part 63—Applicability of General Provisions to Subpart PPPP of Part 63

The Permittee must comply with the applicable General Provisions requirements according to the following table

Citation	Subject	Applicable to subpart PPPP	Explanation
§63.1(a)(1)– (14)	General Applicability	Yes.	
§63.1(b)(1)– (3)	Initial Applicability Determination	Yes	Applicability to subpart PPPP is also specified in §63.4481.
§63.1(c)(1)	Applicability After Standard Established	Yes.	
§63.1(c)(2)– (3)	Applicability of Permit Program for Area Sources	No	Area sources are not subject to subpart PPPP.
§63.1(c)(4)– (5)	Extensions and Notifications	Yes.	
§63.1(e)	Applicability of Permit Program Before Relevant Standard is Set	Yes.	
§63.2	Definitions	Yes	Additional definitions are specified in §63.4581.
§63.3(a)–(c)	Units and Abbreviations	Yes.	
§63.4(a)(1)– (5)	Prohibited Activities	Yes.	
§63.4(b)–(c)	Circumvention/Severability	Yes.	
§63.5(a)	Construction/Reconstruction	Yes.	
§63.5(b)(1)– (6)	Requirements for Existing, Newly Constructed, and Reconstructed Sources	Yes.	
§63.5(d)	Application for Approval of Construction/Reconstruction	Yes.	
§63.5(e)	Approval of Construction/Reconstruction	Yes.	
§63.5(f)	Approval of Construction/Reconstruction Based on Prior State Review	Yes.	
§63.6(a)	Compliance With Standards and Maintenance Requirements—Applicability	Yes.	
§63.6(b)(1)– (7)	Compliance Dates for New and Reconstructed Sources	Yes	Section 63.4483 specifies the compliance dates.
§63.6(c)(1)– (5)	Compliance Dates for Existing Sources	Yes	Section 63.4483 specifies the compliance dates.
§63.6(e)(1)– (2)	Operation and Maintenance	Yes.	
§63.6(e)(3)	Startup, Shutdown, and Malfunction Plan	Yes	Only sources using an add-on control device to comply with the standard must complete startup, shutdown, and malfunction plans.
§63.6(f)(1)	Compliance Except During Startup, Shutdown, and Malfunction	Yes	Applies only to sources using an add-on control device to comply with the standard.

Table 2 to Subpart PPPP of Part 63—Applicability of General Provisions to Subpart PPPP of Part 63 (continued)

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		A 12 1-1 -	
		Applicable to	
Citation	Subject	subpart PPPP	Explanation
§63.6(f)(2)-			_
(3)	Methods for Determining Compliance	Yes.	
§63.6(g)(1)– (3)	Use of an Alternative Standard	Yes.	
§63.6(h)	Compliance With Opacity/Visible Emission Standards	No	Subpart PPPP does not establish opacity standards and does not require continuous opacity monitoring systems (COMS).
§63.6(i)(1)-			
(16)	Extension of Compliance	Yes.	
§63.6(j)	Presidential Compliance Exemption	Yes.	
§63.7(a)(1)	Performance Test Requirements— Applicability	Yes	Applies to all affected sources. Additional requirements for performance testing are specified in §§63.4564, 63.4565, and 63.4566.
§63.7(a)(2)	Performance Test Requirements—Dates	Yes	Applies only to performance tests for capture system and control device efficiency at sources using these to comply with the standards. Section 63.4560 specifies the schedule for performance test requirements that are earlier than those specified in §63.7(a)(2).
§63.7(a)(3)	Performance Tests Required By the Administrator	Yes.	
§63.7(b)–(e)	Performance Test Requirements— Notification, Quality Assurance, Facilities Necessary for Safe Testing, Conditions During Test	Yes	Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standards.
§63.7(f)	Performance Test Requirements—Use Alternative Test Method	Yes	Applies to all test methods except those of used to determine capture system efficiency.
§63.7(g)–(h)	Performance Test Requirements—Data Analysis, Recordkeeping, Reporting, Waiver of Test	Yes	Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standards.
\$63.8(a)(1)– (3)	Monitoring Requirements—Applicability	Yes	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standards. Additional requirements for monitoring are specified in §63.4568.
§63.8(a)(4)	Additional Monitoring Requirements	No	Subpart PPPP does not have monitoring requirements for flares.
§63.8(b)	Conduct of Monitoring	Yes.	
\$63.8(c)(1)– (3)	Continuous Monitoring Systems (CMS) Operation and Maintenance	Yes	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standard. Additional requirements for CMS operations and maintenance are specified in §63.4568.

Table 2 to Subpart PPPP of Part 63—Applicability of General Provisions to Subpart PPPP of Part 63 (continued)

Citation	Subject	Applicable to subpart PPPP	Explanation
§63.8(c)(4)	CMS	No	Section 63.4568 specifies the requirements for the operation of CMS for capture systems and add-on control devices at sources using these to comply.
§63.8(c)(5)	COMS	No	Subpart PPPP does not have opacity or visible emission standards.
§63.8(c)(6)	CMS Requirements	No	Section 63.4568 specifies the requirements for monitoring systems for capture systems and add-on control devices at sources using these to comply.
§63.8(c)(7)	CMS Out-of-Control Periods	Yes.	
§63.8(c)(8)	CMS Out-of-Control Periods and Reporting	No	Section 63.4520 requires reporting of CMS out-of-control periods.
§63.8(d)–(e)	Quality Control Program and CMS Performance Evaluation	No	Subpart PPPP does not require the use of continuous emissions monitoring systems.
§63.8(f)(1)– (5)	Use of an Alternative Monitoring Method	Yes.	
§63.8(f)(6)	Alternative to Relative Accuracy Test	No	Subpart PPPP does not require the use of continuous emissions monitoring systems.
§63.8(g)(1)– (5)	Data Reduction	No	Sections 63.4567 and 63.4568 specify monitoring data reduction.
§63.9(a)–(d)	Notification Requirements	Yes.	
§63.9(e)	Notification of Performance Test	Yes	Applies only to capture system and add-on control device performance tests at sources using these to comply with the standards.
§63.9(f)	Notification of Visible Emissions/Opacity Test	No	Subpart PPPP does not have opacity or visible emission standards.
§63.9(g)(1)– (3)	Additional Notifications When Using CMS	No	Subpart PPPP does not require the use of continuous emissions monitoring systems.
§63.9(h)	Notification of Compliance Status	Yes	Section 63.4510 specifies the dates for submitting the notification of compliance status.
§63.9(i)	Adjustment of Submittal Deadlines	Yes.	
§63.9(j)	Change in Previous Information	Yes.	
§63.10(a)	Recordkeeping/Reporting—Applicability and General Information	Yes.	
§63.10(b)(1)	General Recordkeeping Requirements	Yes	Additional requirements are specified in §§63.4530 and 63.4531.
§63.10(b)(2) (i)–(v)	Recordkeeping Relevant to Startup, Shutdown, and Malfunction Periods and CMS	Yes	Requirements for startup, shutdown, and malfunction records only apply to add-on control devices used to comply with the standards.

Table 2 to Subpart PPPP of Part 63—Applicability of General Provisions to Subpart PPPP of Part 63 (continued)

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Citation	Subject	Applicable to subpart PPPP	Explanation
\$63.10(b)(2) (vi)–(xi)		Yes.	
§63.10(b)(2) (xii)	Records	Yes.	
§63.10(b)(2) (xiii)		No	Subpart PPPP does not require the use of continuous emissions monitoring systems.
§63.10(b)(2) (xiv)		Yes.	
§63.10(b)(3)	Recordkeeping Requirements for Applicability Determinations	Yes.	
§63.10(c)(1)–(6)	Additional Recordkeeping Requirements for Sources with CMS	Yes	
§63.10(c)(7)–(8)		No	The same records are required in §63.4520(a)(7).
§63.10(c)(9)– (15)		Yes.	
§63.10(d)(1)	General Reporting Requirements	Yes	Additional requirements are specified in §63.4520.
§63.10(d)(2)	Report of Performance Test Results	Yes	Additional requirements are specified in §63.4520(b).
§63.10(d)(3)	Reporting Opacity or Visible Emissions Observations	No	Subpart PPPP does not require opacity or visible emissions observations.
§63.10(d)(4)	Progress Reports for Sources With Compliance Extensions	Yes.	
§63.10(d)(5)	Startup, Shutdown, and Malfunction Reports	Yes	Applies only to add-on control devices at sources using these to comply with the standards.
§63.10(e)(1)–(2)	Additional CMS Reports	No	Subpart PPPP does not require the use of continuous emissions monitoring systems.
§63.10(e)(3)	Excess Emissions/CMS Performance Reports	No	Section 63.4520(b) specifies the contents of periodic compliance reports.
§63.10(e)(4)	COMS Data Reports	No	Subpart PPPP does not specify requirements for opacity or COMS.
§63.10(f)	Recordkeeping/Reporting Waiver	Yes.	
§63.11	Control Device Requirements/Flares	No	Subpart PPPP does not specify use of flares for compliance.
§63.12	State Authority and Delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by Reference	Yes.	
§63.15	Availability of Information/Confidentiality	Yes.	

Table 3 to Subpart PPPP of Part 63—Default Organic HAP Mass Fraction for Solvents and Solvent Blends

The Permittee may use the mass fraction values in the following table for solvent blends for which the Permittee does not have test data or manufacturer's formulation data and which match either the solvent blend name or the chemical abstract series (CAS) number. If a solvent blend matches both the name and CAS number for an entry, that entry's organic HAP mass fraction must be used for that solvent blend. Otherwise, use the organic HAP mass fraction for the entry matching either the solvent blend name or CAS number, or use the organic HAP mass fraction from table 4 to this subpart if neither the name or CAS number match.

Solvent/solvent blend	CAS. No.	Average organic HAP mass fraction	Typical organic HAP, percent by mass
1. Toluene	108-88-3	1.0	Toluene.
2. Xylene(s)	1330–20–7	1.0	Xylenes, ethylbenzene.
3. Hexane	110–54–3	0.5	n-hexane.
4. n-Hexane	110–54–3	1.0	n-hexane.
5. Ethylbenzene	100-41-4	1.0	Ethylbenzene.
6. Aliphatic 140		0	None.
7. Aromatic 100		0.02	1% xylene, 1% cumene.
8. Aromatic 150		0.09	Naphthalene.
9. Aromatic naphtha	64742–95–6	0.02	1% xylene, 1% cumene.
10. Aromatic solvent	64742–94–5	0.1	Naphthalene.
11. Exempt mineral spirits	8032–32–4	0	None.
12. Ligroines (VM & P)	8032–32–4	0	None.
13. Lactol spirits	64742-89-6	0.15	Toluene.
14. Low aromatic white spirit	64742-82-1	0	None.
15. Mineral spirits	64742-88-7	0.01	Xylenes.
16. Hydrotreated naphtha	64742–48–9	0	None.
17. Hydrotreated light distillate	64742–47–8	0.001	Toluene.
18. Stoddard solvent	8052-41-3	0.01	Xylenes.
19. Super high-flash naphtha	64742–95–6	0.05	Xylenes.
20. Varsol®solvent	8052-49-3	0.01	0.5% xylenes, 0.5% ethylbenzene.
21. VM & P naphtha	64742-89-8	0.06	3% toluene, 3% xylene.
22. Petroleum distillate mixture	68477–31–6	0.08	4% naphthalene, 4% biphenyl.

Table 4 to Subpart PPPP of Part 63—Default Organic HAP Mass Fraction for Petroleum Solvent Groups^a

The Permittee may use the mass fraction values in the following table for solvent blends for which the Permittee does not have test data or manufacturer's formulation data.

Solvent type	Average organic HAP mass fraction	Typical organic HAP, percent by mass
Aliphatic ^b	0.03	1% Xylene, 1% Toluene, and 1% Ethylbenzene.
Aromatic ^c	0.06	4% Xylene, 1% Toluene, and 1% Ethylbenzene.

^aUse this table only if the solvent blend does not match any of the solvent blends in Table 3 to this subpart by either solvent blend name or CAS number and the Permittee only knows whether the blend is aliphatic or aromatic.

^bMineral Spirits 135, Mineral Spirits 150 EC, Naphtha, Mixed Hydrocarbon, Aliphatic Hydrocarbon, Aliphatic Naphtha, Naphthol Spirits, Petroleum Spirits, Petroleum Oil, Petroleum Naphtha, Solvent Naphtha, Solvent Blend.

^cMedium-flash Naphtha, High-flash Naphtha, Aromatic Naphtha, Light Aromatic Naphtha, Light Aromatic Hydrocarbons, Aromatic Hydrocarbons, Light Aromatic Solvent.

Appendix A to Subpart PPPP of Part 63—Determination of Weight Volatile Matter Content and Weight Solids Content of Reactive Adhesives

1.0 Applicability and Principle

- 1.1 Applicability: This method applies to the determination of weight volatile matter content and weight solids content for most one-part or multiple-part reactive adhesives. Reactive adhesives are composed, in large part, of monomers that react during the adhesive curing reaction, and, as a result, do not volatilize. The monomers become integral parts of the cured adhesive through chemical reaction. At least 70 weight percent of the system, excluding water and non-volatile solids such as fillers, react during the process. This method is not appropriate for cyanoacrylates. For cyanoacrylates, South Coast Air Quality Management District Test Method 316B should be used. This method is not appropriate for one-part moisture cure urethane adhesives or for silicone adhesives. For one-part moisture cure urethane adhesives and for silicone adhesives, EPA Method 24 should be used.
- 1.2 Principle: One-part and multiple-part reactive adhesives undergo a reactive conversion from liquid to solid during the application and assembly process. Reactive adhesives are applied to a single surface, but then are usually quickly covered with another mating surface to achieve a bonded assembly. The monomers employed in such systems typically react and are converted to non-volatile solids. If left uncovered, as in a Method 24 (ASTM D2369) test, the reaction is inhibited by the presence of oxygen and volatile loss of the reactive components competes more heavily with the cure reaction. If this were to happen under normal use conditions, the adhesives would not provide adequate performance. This method minimizes this undesirable deterioration of the adhesive performance.

2.0 Materials and Apparatus

- 2.1 Aluminum foil, aluminum sheet, non-leaching plastic film or non-leaching plastic sheet, approximately 3 inches by 3 inches. Precondition the foil, film, or sheet for 30 minutes in an oven at 110 ± 5 degrees Celsius and store in a desiccator prior to use. Use tongs or rubber gloves or both to handle the foil, film, or sheet.
- 2.2 Flat, rigid support panels slightly larger than the foil, film, or sheet. Polypropylene with a minimum thickness of 1/8 inch is recommended for the support panels. Precondition the support panels for 30 minutes in an oven at 110 ± 5 degrees Celsius and store in a desiccator prior to use. Use tongs or rubber gloves or both to handle the support panels.
- 2.3 Aluminum spacers, 1/8 inch thick. Precondition the spacers for 30 minutes in an oven at 110 ± 5 degrees Celsius and store in a desiccator prior to use. Use tongs or rubber gloves or both to handle the spacers.
- 2.4 Forced draft oven, type IIA or IIB as specified in ASTM E145–94 (Reapproved 2001), "Standard Specification for Gravity-Convection and Forced-Ventilation Ovens" (incorporated by reference, see §63.14).
- 2.5 Electronic balance capable of weighing to ± 0.0001 grams (0.1 mg).
- 2.6 Flat bottom weight (approximately 3 lbs) or clamps.

Material and Apparatus Notes

- 1—The foil, film, or sheet should be thick or rigid enough so that it can be easily handled in the test procedure.
- 3.0 Procedure
- 3.1 Two procedures are provided. In Procedure A the initial specimen weight is determined by weighing the foil, film, or sheet before and after the specimen is dispensed onto the foil, film, or sheet. In Procedure B the initial specimen weight is determined by weighing the adhesive cartridge (kit) before and after the specimen is dispensed.
- 3.2 At least four test specimens should be run for each test material. Run the test at room temperature, 74 degrees Fahrenheit (23 degrees Celsius).

Procedure A

- 1. Zero electronic balance.
- 2. Place 2 pieces of aluminum foil (or aluminum sheet, plastic film, or plastic sheet) on scale.
- 3. Record weight of aluminum foils. (A).
- 4. Tare balance.
- 5. Remove top piece of aluminum foil.
- 6. Dispense a 10 to 15 gram specimen of premixed adhesive onto bottom piece of aluminum foil. Place second piece of aluminum foil on top of the adhesive specimen to make a sandwich.
- 7. Record weight of sandwich (specimen and aluminum foils). (B).
- 8. Remove sandwich from scale, place sandwich between two support panels with aluminum spacers at the edges of the support panels to make a supported sandwich. The spacers provide a standard gap. Take care to mate the edges.
- 9. Place the supported sandwich on a flat surface.
- 10. Place the weight on top of the supported sandwich to spread the adhesive specimen to a uniform thickness within the sandwich. Check that no adhesive squeezes out from between the pieces of aluminum foil or through tears in the aluminum foil.
- 11. Allow to cure 24 hours.
- 12. Remove the sandwich from between the support panels. Record the weight of the sandwich. This is referred to as the 24 hr weight. (C).
- 13. Bake sandwich at 110 degrees Celsius for 1 hour.
- 14. Remove sandwich from the oven, place immediately in a desiccator, and cool to room temperature. Record post bake sandwich weight. (D).

Procedure B

- 1. Zero electronic balance.
- 2. Place two pieces of aluminum foil (or aluminum sheet, plastic film, or plastic sheet) on scale.
- 3. Record weight of aluminum foils. (A).
- 4. Tare balance.
- 5. Place one support panel on flat surface. Place first piece of aluminum foil on top of this support panel.
- 6. Record the weight of a pre-mixed sample of adhesive in its container. If dispensing the adhesive from a cartridge (kit), record the weight of the cartridge (kit) plus any dispensing tips. (F).
- 7. Dispense a 10 to 15 gram specimen of mixed adhesive onto the first piece of aluminum foil. Place second piece of aluminum foil on top of the adhesive specimen to make a sandwich.

8. Record weight of the adhesive container. If dispensing the adhesive from a cartridge (kit), record the weight of the cartridge (kit) plus any dispensing tips. (G).

- 9. Place the aluminum spacers at the edges of the bottom support panel polypropylene sheet. The spacers provide a standard gap.
- 10. Place the second support panel on top of the assembly to make a supported sandwich. Take care to mate the edges.
- 11. Place the supported sandwich on a flat surface.
- 12. Place the weight on top of the supported sandwich to spread the adhesive specimen to a uniform thickness within the sandwich. Check that no adhesive squeezes out from between the pieces of aluminum foil or through tears in the aluminum foil.
- 13. Allow to cure 24 hours.
- 14. Remove the sandwich from between the support panels. Record the weight of the sandwich. This is referred to as the 24 hr weight. (C).
- 15. Bake sandwich at 110 degrees Celsius for 1 hour.
- 16. Remove sandwich from the oven, place immediately in a desiccator, and cool to room temperature.
- 17. Record post-bake sandwich weight. (D).

Procedural Notes

- 1—The support panels may be omitted if the aluminum foil (or aluminum sheet, plastic film, or plastic sheet) will not tear and the adhesive specimen will spread to a uniform thickness within the sandwich when the flat weight is placed directly on top of the sandwich.
- 2—Clamps may be used instead of a flat bottom weight to spread the adhesive specimen to a uniform thickness within the sandwich.
- 3—When dispensing from a static mixer, purging is necessary to ensure uniform, homogeneous specimens. The weighing in Procedure B, Step 6 must be performed after any purging.
- 4—Follow the adhesive manufacturer's directions for mixing and for dispensing from a cartridge (kit).
- 4.0 Calculations
- 4.1 The total weight loss from curing and baking of each specimen is used to determine the weight percent volatile matter content of that specimen

Procedure A

Weight of original specimen (S) = (B)-(A)

Weight of post-bake specimen (P) = (D)-(A)

Total Weight Loss (L) = (S)-(P)

Procedure B

Weight of original specimen (S) = (F)-(G)

Weight of post-bake specimen (P) = (D)-(A)

Total Weight Loss (L) = (S)-(P)

Procedure A and Procedure B

Weight Percent Volatile Matter Content

(V) = [(Total weight loss)/(Initial specimen weight)]
$$\times$$
 100 = [(L)/(S)] \times 100

4.2 The weight volatile matter content of a material is the average of the weight volatile matter content of each specimen of that material. For example, if four specimens of a material were tested, then the weight percent volatile matter content for that material is:

$$V = [V1 + V2 + V3 + V4]/4$$

Where:

Vi = the weight percent volatile matter content of specimen i of the material.

4.3 The weight percent solids content of the material is calculated from the weight percent volatile content of the material.

Weight Percent Solids Content (N) = 100-(V)

Calculation Notes

1—The weight loss during curing and the weight loss during baking may be calculated separately. These values may be useful for identifying sources of variation in the results obtained for different specimens of the same material.

2—For both Procedure A and Procedure B, the weight loss during curing is (S)-[(C)-(A)] and the weight loss during baking is (C)-(D).

E4-2. Should the Permittee elect to claim an allowance for the amount of waste materials shipped to a TSDF in order to assure compliance with the HAP emission limit in Condition E4-1, the Permittee shall use a method that complies with Condition E4-1 and that has been approved by the Technical Secretary and the Administrator. The Division in conjunction with the EPA Administrator has approved the following as it relates to the sampling of said waste materials:

Methodology:

The Permittee may use Method 311 (appendix A to 40 CFR part 63) as prescribed at 40 CFR § 63.4541(a)(1) and follow procedures specified in paragraphs 40 CFR §§ 63.4541(a)(1)(i) and (ii); or use Method 24 (appendix A to 40 CFR part 60) as prescribed at 40 CFR § 63.4541(a)(2) for nonaqueous volatile material/matter_and use that value as a substitute for mass fraction of organic HAP; or for reactive adhesives in which some of the HAP react to form solids are not emitted to the atmosphere, the permittee may use the alternative method contained in appendix A of the Subpart PPPP, rather than Method 24; or the permittee may use an alternative test method (ref. 40 CFR § 63.4541(a)(3)) once the Environmental Protection Agency has approved it. The permittee would have to follow the procedure in 40 CFR § 63.7(f) to submit an alternative test method for approval.

Frequency:

Given the potential variability of the waste materials and the coating operation(s) in terms of amount and number of coatings used, the HAP content of each coating/thinner/cleaning material, and the amount of waste materials collected, stored and/or disposed in a month, the sampling of the waste materials must be conducted at minimum when it is shipped out to a TSDF or on a monthly basis when designated each month for shipment to a TSDF per each compliance option utilized (i.e., the waste must be kept separate for each source that use different compliance option).

Notification:

The Technical Secretary or his authorized representative shall have the option of attending the sampling and shall be notified by the permittee no later than seven days prior to the date samples are to be taken.

Reporting

Shipping Manifests along with sampling results shall be submitted with the MACT semiannual compliance reports.

		Source ID	Stack ID	Control	Control Efficiency (%) from Vendor	Transfer Efficiency (%)	Flow rate at standard conditions (dscfm)
		Hand Paint	HP1 Press 6	dry fabric filter	98%	50	7,000
		Hand Paint	HP2 Press 7	dry fabric filter	98%	50	7,000
		Hand Paint	HP3 Press 4	dry fabric filter	98%	50	7,000
		Hand Paint	HP4 Press 26	dry fabric filter	98%	50	7,000
		Hand Paint	HP5 Press 31	dry fabric filter	98%	50	7,000
		Hand Paint	HP6 Press 33	dry fabric filter	98%	50	7,000
	Source	Hand Paint	HP7 Press 1&39	dry fabric filter	98%	50	7,000
9-0061-01	Description:	Hand Paint	HP8 XX	dry fabric filter	98%	50	7,000
	Description.	Robot	Robot8 XX	dry fabric filter	98%	50	7,000
		Hand Paint	HP9 Honda	dry fabric filter	98%	50	7,000
		Hand Paint	HP10 Press 2	dry fabric filter	98%	50	7,000
		Hand Paint	HP11 BP	dry fabric filter	98%	50	8,000
		Hand Paint	HP12 BP	dry fabric filter	98%	50	8,000
		Instrumentation	CIPB1	dry fabric filter	98%	50	7,000
		Robot	RobotTKA	dry fabric filter	98%	50	7,000
		Robot	RobotTKB	dry fabric filter	98%	50	7,000
		Robot	Honda Robot	dry fabric filter	98%	50	38,000
		Total					Total flow rate
				1			152,000

E5. Conditions that specifically apply to source 59-0061-01

E5-1. Particulate emissions from surface coating of plastics in Source 01 shall be limited to an outlet concentration of 0.02 grains/dscf for each spray booth. Based on a total flow of 152,000 dscfm this amounts to 26.06 lbs/hr and 114.14 tons per year. This is pursuant to 1200-03-07-.04(1) of TAPCR replacing the previous limit of 3 lbs/hr. The respective booths and flow rates are listed above. This can be achieved utilizing filter pads with the high PM collection efficiency specified by the vendor. On October 25, 2012, the Permittee submitted an agreement to the above limitations.

No surface coating shall occur in any spray booth without using the filter control devices identified in the source description above.

A <u>monthly log of total paint usage for the source description above</u> shall be kept to determine monthly and yearly PM emissions. Records of the type, amount of coatings and respective solids content of coatings used in the source description above shall be kept. A monthly record of the number of filters removed from inventory shall be kept. Actual PM emissions shall be calculated monthly based on the summation of specific coatings used (gallons) x solids content of each coating (lbs of solids per gallon) x overspray per cent x (1 – PM control efficiency of filters) and shall be compiled in Log 5. A monthly summary of these logs shall be kept and reported in accordance with Condition E2(a)(1).

Compliance Method: Compliance with 0.02 grains/dscf shall be achieved by utilizing filters with a particulate control efficiency of 98% control efficiency or better and periodic replacement of these filters as needed.

The following log (Log 5) shall be compiled to calculate monthly particulate emissions and compile tonnage per consecutive 12 months for compliance purposes as well as PM fee emissions using the formula below. A monthly summary of this log shall be kept and reported in accordance with Condition **E2(a)(1)**.

LOG 5 – MONTHLY PARTICULATE EMISSIONS (59-0061-01)

MONTH:	YEAR:

A	В	C	D	E	B x C x D x E	
Coating ID	Gallons used	Solids content (lbs solids/gal)	Overspray decimal fraction	1- control efficiency decimal fraction	PM emissions (lbs)	PM emissions (tons)
			(0.5)	(0.02)		
Total					lbs/month	tons/month

For fee and compliance purposes, annual particulate emissions from surface coating shall be calculated using the solids content, established filter control efficiency, and overspray values shown in the formula above. For fee purposes, the time period of emissions shall cover the annual fee period of July 1 through June 30 in accordance with Condition E1. The following logs (Log 6a) for compliance purposes and (Log 6b) for fee purposes shall be kept and reported in accordance with Condition E2(a)(1).

LOG 6a - ANNUAL PARTICULATE EMISSIONS LOG (59-0061-01) for COMPLIANCE PURPOSES

Month / Year	PM Emissions (lbs/month)	PM Emissions (tons/month)	PM Emissions (tons per 12 consecutive months)

LOG 6b - ANNUAL PARTICULATE LOG (59-0061-01) for FEE PURPOSES

Month / Year	PM Emissions (lbs/month)	PM Emissions (tons/month)
July		
June		
Total for Fee Period		

E5-2. Volatile organic compounds (VOC) emitted from Emission Source 59-0061-01 shall not exceed 200 tons/yr during any period of twelve (12) consecutive months based on the agreement letter dated October 25, 2012. This new VOC limit will supersede the previous VOC emission limit of 235 tons/year for this source.

TAPCR 1200-03-07-.07(2)

Compliance Method: Compliance with this emission limitation shall be assured by completing the logs and recordkeeping of data contained in Conditions E3-1 and E3-3 (Logs 1 and 2) of this permit. These logs shall be kept and reported in accordance with Condition E2(a)(1).

E5-3. Visible emissions from each exhaust stack(s) shall not exhibit greater than ten percent (10%) opacity, except for one (1) sixminute period in any one (1) hour period, and for no more than four (4) six-minute periods in any twenty-four (24) hour period. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).

TAPCR 1200-03-05-.03(6) and TAPCR 1200-03-05-.01(1) and the information contained in the agreement letter dated August 21, 1997 from the permittee.

Compliance Method: The permittee shall assure compliance with the opacity standard by utilizing the opacity matrix dated June 18, 1996 that is enclosed as **Attachment 1** to this permit. The Honda Robot spray booth with 38,000 cfm is subject to the Opacity Matrix Decision Tree for EPA Method 9 shown in Attachment 1 since the allowable emissions for PM are above 10 tons/year.

If the magnitude and frequency of excursions reported by the permittee in the periodic monitoring for emissions is unsatisfactory to the Technical Secretary, this permit may be reopened to impose additional opacity monitoring requirements.

Surface coating system with thermal oxidizer control. The permittee is required to have a Compliance Assurance Monitoring (CAM) plan pursuant to Rule 1200-03-10-.04 of the Tennessee Air Pollution Control Regulations. The CAM plan dated May 25, 2011 will be utilized (Attachment 2).

Note: According to the permittee this source is currently not in operation due to lost contracts. All logs maintained and reports submitted to the Division shall indicate not in operation until such time this source is in operation again.

E6. Conditions that specifically apply to source 59-0061-03

E6-1. Total particulate matter emitted from Emission Source 59-0061-03 shall not exceed 2.2 tons during any interval of twelve (12) consecutive months (worst-case hourly particulate emissions are 0.53 lb/hr at maximum coating usage). This emission limitation is established pursuant to TAPCR 1200-03-26-.02 and the revised renewal application dated February 2, 2005.

This spray coating system uses dry filters to control particulate emissions. Use of said filters satisfies the hourly particulate limit. A **monthly log of total paint usage for the source description above** shall be kept to determine monthly and yearly PM emissions. Records of the amount of coatings and respective solids content of coatings used in the source description above shall be kept. A monthly record of the number of filters removed from inventory shall be kept. PM emissions shall be calculated based on the summation of specific coatings used (gallons) x solids content of each coating (lbs of solids per gallon) x overspray per cent x (1 – PM control efficiency of filters) and shall be compiled in Log 5. A monthly summary of these logs shall be kept and reported in accordance with Condition E2(a)(1).

No surface coating shall occur in any spray booth without using said controls.

Compliance Method: Compliance with the annual particulate limit shall be determined utilizing the designated particulate control efficiency of 98% for exhaust filter and solids overspray of 50%. The formula to be used to calculate monthly particulate emissions is as follows:

```
\sum_{i=1}^{n} [usage of coating_{i} (gal/month) \times solids content of coating_{i} (lb/gal)] \times 0.50 \times 0.02 = lb/month TSP
Where i = each coating used 1, 2, 3, ... n
```

The following log (Log 7a) shall be compiled to calculate monthly particulate emissions and compile tonnage per consecutive 12 months for compliance purposes as well as fee emissions using the formula below. A monthly summary of this log shall be kept and reported in accordance with Condition E2(a)(1).

LOG 7a – MONTHLY PARTICULATE EMISSIONS (59-0061-03) MONTH: _____ YEAR: ____

A	В	C	D	${f E}$	B x C x D x E	
	Gallons	Solids content	Overspray	1- control	PM emissions	PM emissions
Coating ID	used		decimal	efficiency	(lbs)	(tons)
		(lbs solids/gal)	fraction	decimal		
				fraction		
			(0.5)	(0.02)		
Total					lbs/month	tons/month

For fee and compliance purposes, annual particulate emissions from surface coating shall be calculated using the solids content, established filter control efficiency, and overspray values shown in the formula above. For fee purposes, the time period of emissions shall cover the annual fee period of July 1 through June 30 in accordance with Condition E1. The following logs (Log 7b) for compliance purposes and (Log 7c) for fee purposes shall be kept and reported in accordance with Condition E2(a)(1).

LOG 7b - ANNUAL PARTICULATE EMISSIONS LOG (59-0061-03) for COMPLIANCE PURPOSES

Month / Year	PM Emissions (lbs/month)	PM Emissions (tons/month)	PM Emissions (tons per 12 consecutive months)

LOG 7c - ANNUAL PARTICULATE LOG (59-0061-03) for FEE PURPOSES

Month / Year	PM Emissions (lbs/month)	PM Emissions (tons/month)
July		
June		
Total for Fee Period		

E6-2. Volatile organic compounds (VOC) emitted by Emission Source 59-0061-03 shall not exceed 5.0 tons during any period of twelve (12) consecutive months. The annual VOC limit is based on the minor modification application dated October 11, 2005.

TAPCR 1200-03-07-.07(2)

This source shall not be operated unless the thermal oxidizer control equipment is in operation except during periods of startup, shutdown, and malfunction. This exception shall not apply to any malfunction that results from inadequate design, operation, or maintenance; or from any other preventable upset condition. Additionally, the Technical Secretary may initiate enforcement action against the permittee for operating this source during a malfunction that is not promptly resolved.

The oxidizer shall be operated with a minimum combustion chamber temperature of $1400^{\circ}F$ averaged over a three-hour period. This requirement is based on the results of destruction efficiency testing of the thermal oxidizer on October 1, 2002 and TAPCR 1200-03-18-.03(5)(b)9. The combustion chamber temperature shall be continuously monitored and recorded. Records of this temperature, which provide sufficient information to determine compliance with the requirements above, shall be maintained at the source location for inspection by the Technical Secretary or his representative. Any deviations from the minimum combustion chamber temperature requirement (three-hour data averaging basis) shall be reported in accordance with Condition **E2** of this permit.

All VOC emissions must be captured and contained for discharge through the control device. The enclosure in which this source operates shall meet the following criteria to meet the requirements for permanent total enclosure and to assure that 100% of the solvent emissions are being captured and sent to the control device.

- (a) Any natural draft opening (NDO) shall be at least four equivalent opening diameters from each VOC emitting point unless otherwise specified by the Administrator. An NDO is any permanent opening in the enclosure that remains open during operation of the facility and is not connected to a duct in which a fan is installed;
- (b) The total area of all NDO shall not exceed 5% of the surface area of the enclosure's four walls, floor, and ceiling;
- (c) The average facial velocity of air through all NDO shall be at least 200 feet per minute. The direction of air flow through all NDO shall be into the enclosure.
- (d) All access doors and windows whose areas are not included in item (b) and are not included in the calculation in item (c) shall be closed during routine operation of the process.

Compliance with the permanent total enclosure criteria of section (c) above shall be assured by performing weekly readings of the average facial velocity of air into the enclosure through all NDO. Records of these readings shall be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. Any readings below the minimum average facial velocity criteria of section (c) above shall be considered deviations and shall be reported as such in accordance with Condition **E2** of this permit.

Compliance with the above minimum combustion chamber temperature requirement and all permanent total enclosure criteria shall assure an overall VOC removal efficiency of 98.4% (based on an average 98.4% VOC destruction efficiency as per the thermal oxidizer's destruction efficiency testing conducted October 17, 2003 and 100% capture by the enclosure of solvent emissions).

Compliance Method: The RTO shall be monitored in accordance with the Compliance Assurance Plan (Attachment 2) dated May 25, 2011 and approved by the Division. Compliance with the VOC emission limitation shall be determined utilizing the designated VOC removal efficiency of 98.4% and by completing the logs and recordkeeping of data contained in Conditions **E3-1** and **E3-3** (Logs 1 and 2) of this permit. These logs shall be kept and reported in accordance with Condition **E2(a)(1)**. The formula to be used to calculate monthly VOC emissions is as follows:

$$\sum_{i=1}^{n} [usage of coating_{i} (gal/month) \times VOC content of coating_{i} (lb/gal)] \times \underbrace{\begin{array}{c} 0.016/2000 \\ lbs/ton \end{array}}_{=} ton/month VOC$$

Where i = each coating used 1, 2, 3, ... n

E6-3. Visible emissions from the thermal oxidizer's exhaust stack shall not exhibit greater than twenty percent (20%) opacity, except for one (1) six-minute period in any one (1) hour period, and for no more than four (4) six-minute periods in any twenty-four (24) hour period. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).

TAPCR 1200-03-05-.03(6) and TAPCR 1200-03-05-.01(1)

Compliance Method: The permittee shall assure compliance with the opacity standard by utilizing the opacity matrix dated June 18, 1996 that is enclosed as **Attachment 1** to this permit. The Honda Robot spray booth with 38,000 cfm is subject to the Opacity Matrix Decision Tree for EPA Method 9 shown in Attachment 1 since the allowable emissions for PM are above 10 tons/year.

If the magnitude and frequency of excursions reported by the permittee in the periodic monitoring for emissions is unsatisfactory to the Technical Secretary, this permit may be reopened to impose additional opacity monitoring requirements.

59-0061-23 Source Description: Wave Soldering Operation

E7. Conditions that specifically apply to source 59-0061-23

E7-1. Volatile organic compounds (VOC) emitted by Emission Source 59-0061-23 shall not exceed 16.26 tons during any period of twelve (12) consecutive months. The annual VOC limit is based on the minor modification application dated May 22, 2007.

TAPCR 1200-03-07-.07(2)

Compliance Method: Compliance with this emission limitation shall be assured by completing the logs and recordkeeping of data contained in Conditions E3-1 and E3-3 (Logs 1 and 2) of this permit. These logs shall be kept and reported in accordance with Condition E2(a)(1).

E7-2. Maximum solder usage at Emission Source 59-0061-23 shall not exceed 8.5 tons per month. Lead emissions shall not exceed 12.75 pounds per month (0.0765 ton during any period of twelve (12) consecutive months). These solder usage and lead emission limits are based on the minor modification application dated May 22, 2007.

Compliance Method: Compliance with this condition shall be determined by completing Log 8 in Condition E7-3 below. This log shall be kept and reported in accordance with Condition E2(a)(1).

E7-3. This source emits less than the threshold of applicability for TAPCR 1200-03-22 for lead emission standards. The following log of solder usage from wave soldering operations and lead HAP emissions for fee purposes shall be kept. The time period of lead HAP emissions shall cover the Annual Accounting Period (AAP) of July 1 through June 30 in accordance with Condition **E1**.

LOG 8 – ANNUAL LOG OF SOLDER USAGE AND LEAD EMISSIONS (59-0061-23)

Month / Year	Solder Usage (lb/month)	Solder Usage (ton/month)	Lead Emissions (lbs)	Lead Emissions (tons)
AAP Total				

E7-4. Visible emissions from each exhaust stack(s) shall not exhibit greater than twenty percent (20%) opacity, except for one (1) six-minute period in any one (1) hour period, and for no more than four (4) six-minute periods in any twenty-four (24) hour period. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).

TAPCR 1200-03-05-.03(6) and TAPCR 1200-03-05-.01(1)

Compliance Method: The permittee shall assure compliance with the opacity standard by utilizing the opacity matrix dated June 18, 1996, and amended September 12, 2005 (**Attachment 1**). This source is subject to the Opacity Matrix Decision Tree for EPA Method 9 shown in Attachment 1 since the allowable emissions for VOCs are above 10 tons/year.

If the magnitude and frequency of excursions reported by the permittee in the periodic monitoring for emissions is unsatisfactory to the Technical Secretary, this permit may be reopened to impose additional opacity monitoring requirements.

END OF PERMIT 563336

ATTACHMENT 1

OPACITY MATRIX DECISION TREE for VISIBLE EMISSION EVALUATION METHOD 9 dated JUNE 18, 1996 and amended September 12, 2005

Decision Tree PM for Opacity for Sources Utilizing EPA Method 9*

Notes:

PM = Periodic Monitoring required by 1200-03-09-.02(11)(e)(iii).

This Decision Tree outlines the criteria by which major sources can meet the periodic monitoring and testing requirements of Title V for demonstrating compliance with the visible emission standards in paragraph 1200-03-05-.01. It is not intended to determine compliance requirements for EPA's Compliance Assurance Monitoring (CAM) Rule (formerly referred to as Enhanced Monitoring – Proposed 40 CFR 64).

Examine each emission unit using this Decision Tree to determine the PM required.*

Use of continuous emission monitoring systems eliminates the need to do any additional periodic monitoring.

Visible Emission Evaluations (VEEs) are to be conducted utilizing EPA Method 9. The observer must be properly certified to conduct valid evaluations.

Typical Pollutants Particulates, VOC, CO, SO₂, NO_x, HCl, HF, HBr, Ammonia, and Methane.

Initial observations are to be repeated within 90 days of startup of a modified source, if a new construction permit is issued for modification of the source.

A VEE conducted by TAPCD personnel after the Title V permit is issued will also constitute an initial reading.

Reader Error

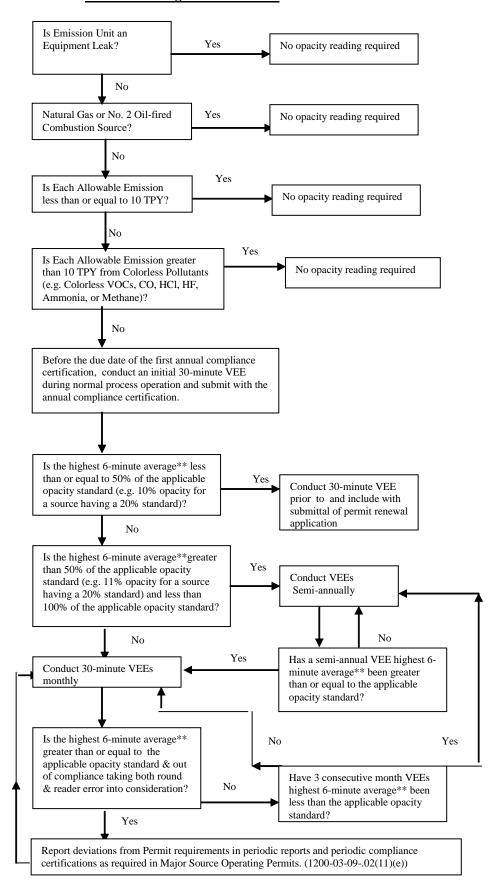
EPA Method 9, Non-NSPS or NESHAPS stipulated opacity standards: The TAPCD guidance is to declares noncompliance when the highest six-minute average** exceeds the standard plus 6.8% opacity (e.g. 26.8% for a 20% standard).

EPA Method 9, NSPS or NESHAPS stipulate opacity standards: EPA guidance is to allow only engineering round. No allowance for reader error is given.

*Not applicable to Asbestos manufacturing subject to 40 CFR 61.142

**Or second highest six-minute average, if the source has an exemption period stipulated in either the regulations or in the permit.

Dated June 18, 1996 Amended September 12, 2005



ATTACHMENT 2

CAM Plan dated May 25, 2011

Compliance Assurance Monitoring Plan

Purpose

The primary purpose of this plan is to ensure that the surface coating operation with oxidation controls is operated as designed to minimize emissions as required by 40 CFR 64.4.

Process Description

Calsonic Kansei North America Corporation operates a surface coating process that uses a thermal oxidation system to control emissions of VOCs and HAPs. The Source is listed in the Title V Permit as source #59-0061-03.

Primary Indicators

The system temperature is the primary indicator that the thermal oxidizer is operating properly. The thermal oxidizer has been tested and demonstrated to achieve better than 97% destruction at a temperature of at least 1400°F.

All VOC and HAP emissions must be captured to achieve the 97% destruction efficiency, so the system must be maintained as a Permanent Total Enclosure.

Compliance Assurance Monitoring

Temperature

The oxidizer shall be operated with a minimum combustion chamber temperature of 1400°F averaged over a three hour period. The combustion chamber temperature shall be continuously monitored and recorded. Records of this temperature, shall be maintained at the source location.

Permanent Total Enclosure (PTE)

- (a) Any natural draft opening (NDO) shall be at least four equivalent opening diameters from each VOC emitting point unless otherwise specified by the Administrator for the Division of Air Pollution Control. An NDO is any permanent opening in the enclosure that remains open during operation of the facility and is not connected to a duct in which a fan is installed.
- (b) The total area of all NDO's shall not exceed 5% of the surface area of the enclosure's four walls, ceiling and floor.
- (c) The average face velocity of air through all NDO's shall be at least 200 feet per minute. The direction of air flow through all NDO's shall be into the enclosure.
- (d) All access doors and windows whose areas are not included in item (b) and are not included in the calculation in item (c) shall be closed during routine operation of the process.

Troubleshooting Temperature Drop or Loss of PTE

The following are some possible causes of a temperature drop below 1400°F:

Cause of Malfunction	Remedy

The following are some possible causes of a face velocity at NDO's being less than 200

Cause of Malfunction	Remedy

Documentation

Records of the oxidation temperature shall be maintained at the source location.

Compliance with the permanent total enclosure shall be documented by performing measurements, a minimum of once every calendar week, of the average face velocity of air into the enclosure through all NDO's. Records of these measurements shall be maintained at Calsonic Kansei North America.